

STATE OF MICHIGAN

SUPREME COURT

ASSOCIATED BUILDERS AND CONTRACTORS,
GREATER MICHIGAN CHAPTER, a Michigan
Non-Profit Corporation,

Plaintiff/Appellant,

-vs-

Michigan Supreme Court
149622

Lower Docket Case No.
12-000406-CZ

Court of Appeals Docket No.
313684

CITY OF LANSING,

Defendants/Appellees,

MASUD LABOR LAW GROUP
By: Kraig M. Schutter (P45339)
Attorneys for Plaintiff-Appellee
4449 Fashion Square Boulevard, Suite 1
Saginaw, MI 48603-5217
(989) 792-4499

PLUNKETT COONEY
By: Michael S. Bogren (P34835)
Attorneys for Defendant-Appellant
950 Trade Centre Way, Suite 310
Kalamazoo, MI 49002
(269) 226-8822

**BRIEF IN SUPPORT OF APPEAL TO THE MICHIGAN SUPREME COURT
BY PLAINTIFF/APPELLANT ASSOCIATED BUILDERS AND CONTRACTORS,
GREATER MICHIGAN CHAPTER, ("ABC")
FROM THE OPINION AND ORDER OF THE COURT OF APPEALS
DISMISSING ABC'S CHALLENGE TO THE CONSTITUTIONALITY OF
THE CITY OF LANSING'S PREVAILING WAGE ORDINANCE**

ORAL ARGUMENT REQUESTED

MASUD LABOR LAW GROUP

4449 Fashion Square Boulevard, Suite 1 | Saginaw, Michigan 48603 | p (989) 792-4499 | f (989) 792-7725 | www.masudlaborlaw.com

TABLE OF CONTENTS

STATEMENTS OF QUESTIONS INVOLVED.....	iii
INDEX OF AUTHORITIES.....	iv
INDEX OF APPENDED LEGAL MATERIALS	viii
INTRODUCTION	1
STATEMENT OF FACTS	3
ARGUMENTS.....	6
I. THE COURT OF APPEALS COMMITTED REVERSIBLE ERROR WHEN IT REFUSED TO FOLLOW (AND THEREBY NEGATED) THE LONGSTANDING PRECEDENT OF THE SUPREME COURT IN <i>LENNANE</i> HOLDING THAT MUNICIPALITIES DO NOT POSSESS DELEGATED AUTHORITY TO REGULATE THIRD PARTY WAGES OR BENEFITS	6
A. Standard of Review.....	7
B. Interpreting both the Michigan Constitution and the Home Rule City Act, the Michigan Supreme Court ruled in <i>Lennane</i> that regulating third party wage and benefit rates is not a municipal concern but, rather, a state concern over which municipalities have no authority to regulate	7
C. Since Lansing’s Prevailing Wage Ordinance is precisely the same type of regulation as that found to be outside the scope of municipal authority as determined by the Supreme Court in <i>Lennane</i> , the Court of Appeals was obligated by the doctrine of <i>stare decisis</i> to follow it.....	11
D. Since only the Supreme Court can judicially determine whether its holdings are no longer valid, the majority panel of the court of Appeals violated the principle of <i>stare decisis</i> by concluding that the Supreme Court’s reasoning in <i>Lennane</i> has been superseded by case law and is therefore obsolete.....	15

II.	EVEN IF THE SUPREME COURT WERE TO RECONSIDER THE SUBSTANCE OF ITS RULING IN <i>LENNANE</i> (WHICH IT NEED NOT DO SINCE REMAND IS APPROPRIATE), THE COURT SHOULD NOT OVERTURN ITS LONGSTANDING PRECEDENT THAT CITIES LACK THE AUTHORITY TO REGULATE THIRD PARTY WAGE AND FRINGE BENEFIT RATES	24
A.	Standard of Review	24
B.	While the Michigan Supreme Court (unlike the Court of Appeals) obviously maintains the power to overrule its own precedent, all appropriate factors weigh in favor of maintaining its precedent in <i>Lennane</i>	24
C.	The Michigan Supreme Court should not overrule its precedent in <i>Lennane</i> because the Legislature - that branch of government best suited to determine public policy – has seen fit <i>not</i> to legislatively overrule the decision, thereby indicating its acceptance of <i>Lennane</i> ’s precepts.....	37
CONCLUSION		41
RELIEF REQUESTED		42

STATEMENTS OF QUESTIONS INVOLVED

- 1) DID THE COURT OF APPEALS COMMIT REVERSABLE ERROR WHEN IT REFUSED TO FOLLOW (AND THEREBY NEGATED) THE LONGSTANDING PRECEDENT OF THE SUPREME COURT IN *LENNANE* HOLDING THAT MUNICIPALITIES DO NOT POSSESS DELEGATED AUTHORITY TO REGULATE PRIVATE THIRD PARTY WAGES?

THE APPELLANT SAYS: YES

THE APPELLEE SAYS: NO

THE INGHAM COUNTY
CIRCUIT COURT SAID: YES

THE COURT OF APPEALS SAID: NO

- 2) ALTHOUGH REMAND TO THE COURT OF APPEALS WITH AN ORDER TO FOLLOW THE SUPREME COURT'S PRECEDENT IN *LENNANE* IS CERTAINLY APPROPRIATE IN THIS CASE, IN THE EVENT THE SUPREME COURT WERE TO RECONSIDER ITS PRECEDENT NEGATED BY THE COURT OF APPEALS, SHOULD IT OVERRULE THAT PRECEDENT?

THE APPELLANT SAYS: NO

THE APPELLEE SAYS: YES

THE INGHAM COUNTY
CIRCUIT COURT SAID: NOT APPLICABLE

THE COURT OF APPEALS SAID: NOT APPLICABLE

INDEX OF AUTHORITIES

Cases

<i>Adams Outdoor Advertising, Inc., v. City of Holland</i> , 234 Mich App 681; 600 NW2d 339 (1999)	20, 21, 22
<i>Adams Outdoor Advertising v. East Lansing</i> , 439 Mich 209; 483 NW2d 38 (1992).....	21
<i>AFSCME v. Detroit</i> , 468 Mich 388, 410; 662 NW2d 695 (2003).....	30
<i>Andre Bezeau v. Palace Sports & Entertainment</i> , 487 Mich 455, 461; 795 NW2d 797 (2010).....	24
<i>Astoria Federal S & L Assn. v. Solimino</i> , 501 US 104, 107-108; 111 S Ct 2166; 115 L Ed 2d 96 (1991)	35
<i>Attorney General, ex rel. Lennane v. City of Detroit</i> , 225 Mich 631; 196 NW 391 (1923).....	<i>passim</i>
<i>Belle Isle Grill Corp v. Detroit</i> , 256 Mich App 463, 481; 666 NW2d 271 (2003).....	32
<i>Bivens v. City of Grand Rapids</i> , 443 Mich 391, 397; 505 NW2d 239 (1993).....	8, 31
<i>Bora Petrovski v. Vasko Nestorovski</i> , 283 Mich App 177, 207-208; 769 NW2d 720 (2009)	18
<i>Boyd v. W.G. Wade Shows</i> , 443 Mich 515; 505 NW2d 544 (1993),.....	18, 19, 20, 23, 24, 39
<i>Brimmer v. Village of Elk Rapids</i> , 365 Mich 6, 12-13; 112 NW2d 222 (1961)	26, 33
<i>Bronner and Bronner v. City of Brighton</i> , 495 Mich 209, 220-221; 848 NW2d 380 (2014)	7
<i>Central Advertising Co. v. Ann Arbor</i> , 391 Mich 533; 218 NW2d 27 (1974).....	21, 22
<i>City of Taylor v. Detroit Edison Co.</i> , 475 Mich 109, 115-116; 715 NW2d 28 (2006)	7, 8, 25, 31

<i>Clements v. McCabe</i> , 210 Mich 207; 177 NW 72 (1920).....	39, 40
<i>Consumers Power Co v. Muskegon Co.</i> , 346 Mich 243, 251, 665; 78 NW2d 223 (1956).....	20, 39
<i>DeMull v. City of Howell</i> , 368 Mich 242; 118 NW2d 232 (1962).....	21
<i>Detroit v. Walker</i> , 445 Mich 682, 690; 520 NW2d 135 (1994).....	31
<i>Devillers v. Auto Club Ins. Assn.</i> , 473 Mich 562, 588-89; 702 NW2d 539 (2005)	37
<i>Ford Motor Co. v. City of Woodhaven</i> , 475 Mich 425, 439-440; 716 NW2d 247 (2006)	38
<i>Garwols v. Bankers Trust Co.</i> , 251 Mich 420, 424-425; 232 NW 239 (1930)	35
<i>Gildersleeve v. Lamont</i> , 331 Mich 8, 12; 49 NW2d 36 (1951).....	33
<i>In Re Clayton Estate</i> , 343 Mich 101; 72 NW2d 1 (1955).....	38, 39
<i>Kane v. Flint</i> , 342 Mich 74, 77-78; 69 NW2d 156 (1955)	33
<i>Karaczewski v. Farbman Stein & Co.</i> , 478 Mich. 28; 732 NW2d 56 (2007).....	20
<i>Lubertha Ratliff v. General Motors Corp.</i> , 127 Mich App 410, 416-417; 339 NW2d 196 (1983)	15
<i>Magreta v. Ambassador Steel Co. (on rehearing)</i> , 380 Mich 513; 158 NW2d 473 (1968).....	38
<i>Nation v. WDE Electric Co.</i> , 454 Mich 489, 494-495; 563 NW2d 233 (1997)	34
<i>Nummer v. Dept. of Treasury</i> 448, Mich 534; 533 NW2d250 (1995).....	35, 36

<i>Olson v. Highland Park</i> , 312 Mich 688, 695; 20 NW2d 773 (1945).....	33
<i>Paris Meadows, LLC v. City of Kentwood</i> , 287 Mich App 136, 145 n.3; 783 NW2d 133 (2010).....	17
<i>People of Michigan v. Lamont Stinnett</i> , 480 Mich 865; 737 NW2d 760 (2007).....	7
<i>People v. Green</i> , 260 Mich App 710, 720 n. 5; 680 NW2d 477 (2004) (unpublished).....	17
<i>People v. Mitchell</i> , 428 Mich 364, 369; 408 NW2d 798 (1987).....	16
<i>People v. Recorder's Court Judge #2</i> , 73 Mich App 156, 162; 250 NW2d 812 (1977), lv den 400 Mich 825 (1977).....	15
<i>People v. Reeves</i> , 448 Mich 1, 8; 528 NW2d 160 (1995).....	34
<i>People v. Sell</i> , 310 Mich 305, 315; 17 NW2d 193 (1945).....	32
<i>Rental Property Owners Association of Kent County v. City of Grand Rapids</i> , 455 Mich 246; 566 NW2d 517 (1997).....	30, 31
<i>Roberts v. IXL Glass</i> , 259 Mich 644; 244 NW 188 (1932).....	19, 23
<i>Roberts v Mecosta County General Hospital</i> , 466 Mich 57, 62; 642 NW2d 663 (2002).....	7
<i>Robinson v. City of Detroit</i> , 462 Mich 439; 613 NW2d 307 (2000).....	24, 26, 27, 29
<i>Rodriguez de Quijas v. Shearson/American Express, Inc.</i> , 490 US 477, 484 (1989).....	18
<i>Rudolph v Guardian Protective Servs.</i> , 486 Mich 868; 780 NW2d 571 (2010).....	17, 24
<i>Rudolph v. Guardian Protective Servs.</i> , 2009 Mich App LEXIS 1989 (2009), (unpublished).....	15, 16, 17, 18, 22, 42

<i>Schwartz v City of Flint</i> (after remand), 120 Mich App 449, 462; 329 NW2d (1982).....	15
<i>Sinas v. Lansing</i> , 382 Mich 407, 411; 170 NW2d 23 (1969).....	8
<i>State Treasurer v. Sprague</i> , 284 Mich App 235, 242; 772 NW2d 452 (2009).....	16
<i>Storey v. Meijer, Inc.</i> , 431 Mich 368, 379; 429 NW2d 169 (1988).....	35, 36
<i>Stottlemeyer v. General Motors</i> , 399 Mich 605; 250 NW2d 486 (1977).....	38
<i>Topps-Toeller, Inc. v. City of Lansing</i> , 47 Mich App 720; 209 NW2d 843 (1973).....	16
<i>Wikman v. Novi</i> , 413 Mich 617, 638; 322 NW2d 103 (1982).....	38

Other Authorities and Statutes

Comp. Laws 1915, § 3307(t)	13
Davis-Bacon Act, 40 USC 3141, <i>et seq</i>	4
Home Rule City Act, MCL § 117.1 <i>et seq</i>	<i>passim</i>
Michigan Zoning Enabling Act, MCL 125.3101	39
1978, Act 499	39
Const 1908, Article VIII, §21	12
Const 1963, Article III, § 7	34
Const 1963, Article VII § 2.....	36
Const 1963, Article VII, § 22.....	12, 13, 34
MCR 7.215.....	17
Michigan Constitution, Article IV, Section 1	7
Michigan Minimum Wage Law, PA 154 of 1964	25
Michigan Payment of Wages and Fringe Benefits Act, PA 390 of 1978	27, 28
Workers' Compensation Act, § 845	18
Workforce Opportunity Wage Act, PA 138 of 2014	25

INDEX OF APPENDED LEGAL MATERIALS

Exhibit A	Lansing Penalty for not Following the Prevailing Wage Ordinance
Exhibit B	Beacon Hill Institute at Suffolk University Study
Exhibit C	Wage Determination
Exhibit D	Bureau of Labor Statistics
Exhibit E	Union Density

INTRODUCTION

Plaintiff-Appellant, Associated Builders and Contractors, Greater Michigan Chapter (“ABC”), is a Michigan non-profit corporation comprising various employers operating in the construction industry. Defendant-Appellee, the City of Lansing (“Lansing” or “City”) is a “body corporate” established pursuant to the Home Rule City Act, MCL § 117.1 *et seq.* (“HRCA”). On behalf of its members, ABC challenged Lansing’s Prevailing Wage and Benefit Standards Ordinance (“PWO” or “Ordinance”) *Appendix at p. 9A*, before the Ingham County Circuit Court on the basis that the Ordinance unlawfully regulates the payment of wage and fringe benefit rates ABC contractors pay to their employees working on certain city construction projects.¹ *Appendix Complaint at pp. 1A - 8A*. Although the Ordinance was struck down by the Circuit Court, *Appendix Trial Court Opinion and Order pp. 20A-25A*, a three-judge panel of the Michigan Court of Appeals reversed and reinstated it. The decision was two-to-one and included a written decision of the majority, *Appendix Court of Appeals Decision pp. 26A – 38A*, and a written opinion of the dissent, *Appendix Court of Appeals Decision pp. 39A-40A*.

The basis for ABC’s legal challenge to the Ordinance is longstanding Michigan Supreme Court precedent which holds that a municipality (such as Lansing) lacks authority to regulate the level of wages and benefits provided by private businesses to its employees, whether through an ordinance or otherwise. The Supreme Court has made it crystal clear that such regulation is a matter of state – not municipal – concern. Thus, by enacting its PWO, Lansing exceeded its delegated home rule powers. The Circuit Court agreed that it was bound by the Supreme Court’s pronouncement on the subject and dutifully declared by way of written order dated November

¹ Although ABC originally sought a ruling on the City’s companion “Living Wage Ordinance,” *Appendix pp. 10A – 16A*, the trial court determined at page 3 of its Opinion and Order that the ordinance had not actually been enacted and was “therefore not at issue here.” *Appendix at 22A*. Thus, ABC proceeds in this Application for Appeal only on the issue of the City’s PWO.

14, 2012, that Lansing's Ordinance *ultra vires* and the Court enjoined Lansing from further enforcement of it. Two of the judges on the Court of Appeals panel, on the other hand, determined that it was not so confined. Looking to purported changes in the legal landscape, the majority of the Court of Appeals panel declared the Supreme Court precedent obsolete and, thus, inapplicable. The majority then flipped the rule 180 degrees, ruling that, henceforth, the regulation of third party wage and benefit rates is no longer an exclusive state concern, but rather constitutes a matter of legitimate municipal concern.

The Court of Appeals clearly overstepped its authority by rendering Michigan Supreme Court precedent null and void on the issue of whether municipalities may regulate the wages and benefits of private third parties. That decision should be reversed because only the Supreme Court can overrule its own precedent or declare Supreme Court precedent obsolete. Further, the Supreme Court should not overrule its own precedent, even if it is from 1923, because it is not obsolete. This Court's prior pronouncement that regulation of private third party wages and benefits constitutes an exclusive state concern was then, and is today, the only real and sensible interpretation of the Legislature's intent. Indeed, there are no acts of the Michigan Legislature or decisions of the Supreme Court contradicting that decision. Since the Legislature has never seen fit to legislatively overturn the Supreme Court's ruling that regulation of private party wage and benefit rates is a matter of state concern (and not a municipal concern) under the HRCA, the Court should not now reverse its longstanding precedent on the issue. To do so, would invade the public policy setting function of the Legislature which is deemed to have accepted the decades old precedent of the Court. ABC therefore requests that this Supreme Court reverse the decision of the Court of Appeals and reinstate the Circuit Court's decision striking down the City of Lansing's impermissible Ordinance.

STATEMENT OF FACTS

ABC is a trade association whose members are general contractors, subcontractors, builders, suppliers, and other businesses engaged in or associated with the construction industry. Its membership is comprised of over three hundred member companies, located in twenty three Michigan counties. ABC's fundamental purpose is to foster the "merit shop" philosophy of free enterprise and to encourage open competition and free market principles in the awarding and administering of public and private construction contracts. On behalf of its members, ABC is opposed to all legislation and laws which unjustly stifle free competition in the construction industry. Most ABC members deal individually with their employees regarding wages, hours, and other conditions of employment and generally are not parties to collective bargaining agreements with labor organizations. Many of ABC's members have performed, or have sought to perform, construction projects within Lansing and further remain interested in performing such construction projects. Lansing's PWO stands in contradiction to ABC's free enterprise objectives.

The PWO states in relevant part:

Sec. 206.18. Prevailing wage and benefit standards prescribed.

(a) No contract, agreement or other arrangement for construction on behalf of the City and involving mechanics and laborers, including truck drivers of the contractor and/or subcontractors, employed directly upon the site of the work, shall be approved or executed by the City unless the contractor and his or her subcontractors furnish proof and agree that such mechanics and laborers so employed shall receive at least the prevailing wages and fringe benefits for corresponding classes of mechanics and laborers, as determined by statistics compiled by the United States Department of Labor and related to the Greater Lansing area by such Department.

(b) Any person, firm, corporation or business entity, upon being notified that it is in violation of this section and that an amount due to his, her or its employees, shall have 30 days from the date of the notice to pay the deficiency by paying such employee or employees, whichever is appropriate,

the amounts due. If the person, firm, corporation or business entity fails to pay within the 30-day period, he, she, or it shall be subject to the penalty provided in Section 206.99.²

(c) The provisions of this section shall be inserted in all bid documents requiring the payment of prevailing wages.

(d) The enforcement agency for this section shall be as determined by the Mayor.

Appendix at p. 9A.

The result of Lansing's PWO is that union construction firms with high wage and benefit costs are protected from competition from non-union ABC member firms utilizing market-driven wage and benefit scales. The PWO essentially requires companies performing city construction projects to pay their employees at union scale.³ For a non-union ABC member contractor to have any hope of having his bid to the City selected, this means he must inflate his market-driven wage and benefit rates up to the bloated scales of his union competitor on PWO projects. By

² Section 206.99 provides that failure to abide by the Ordinance is a misdemeanor offense. It also provides for an award of back wages, plus interest, and costs imposed against the employer. *Exhibit A.*

³ To say the Lansing PWO requires the payment of "prevailing" wages in its locality is a misnomer. The Ordinance actually results in the payment of "union scale" wages for construction work. By its terms at subsection (a), the Lansing PWO incorporates the wage and benefit rates determined by the Wage and Hour Division of the United States Department of Labor ("USDOL") in its role as administrator of the federal Davis-Bacon Act, 40 U.S.C. 3141, *et. seq. Appendix at p. 9A.* Under the federal law, the USDOL is supposed to gather wage and benefit information from various sources to determine the "prevailing rates" of contractors in particular localities. According to researchers at Beacon Hill Institute at Suffolk University, an independent, non-partisan research organization, the USDOL's process in actual practice nearly always results in the adoption of the wages and benefits identified in local union collective bargaining agreements. Glassman, Sarah; Head, Michael; Tuerck, David G.; Bachman, Paul; *The Federal Davis-Bacon Act: The Prevailing Mismeasure of Wages*, Beacon Hill Institute (2008), pp. 19-20. *Exhibit B.* Indeed, the "Identifiers" in the current USDOL wage determination for Ingham County demonstrate that nearly every classification of construction worker is to be paid union scale wages and benefits. *Exhibit C.* It is only ornamental ironworkers, landscape laborers, metal building erectors, and a handful of equipment operators and truck drivers which may be paid a rate other than the local union rate.

forcing non-union contractors to ratchet up their market-driven wage and benefit rates equal to the higher rates of union contractors, the competitive advantage non-union ABC members enjoy is lost and the competitive disadvantage union contractors suffer from is alleviated. Of course, union construction workers perform far less construction work in the United States than do non-union construction workers, and there is no reason to believe the disparity is any different within the City of Lansing.⁴ Thus, the result of the PWO is to provide protection to union contractors from ABC member competitive, open-market advantages, all at taxpayer expense.

Another result of the PWO harmful to ABC members is that non-union contractors must conform to the often confusing union jurisdiction rules and local union job classification systems – matters with which they have little, if any, experience or understanding. Because the particular wages and fringe benefits required to be paid to employees on a PWO project under 206.18(a) are fixed to the job classifications of employees (carpenter, roofer, plumber, etc.), *Appendix at p. 9A*, contractors performing prevailing wage work must understand when the work of a particular employee crosses from one union jurisdiction into another. This is not an easy task. Is the application of waterproofing sealant to the exterior of a concrete building the work of a painter? A carpenter? A mason? A laborer? Is it a shared jurisdiction between some or all of these unions? A non-union contractor often must guess.

Until the PWO was stuck down by the Ingham County Circuit Court, many of ABC's members seeking or doing business with Lansing were required to adjust their employee

⁴ According to the Federal Bureau of Labor Statistics, only 14.7% of United States construction workers were represented by a union in 2013. <http://www.bls.gov/news.release/union2.t03.htm> *Exhibit D*. In regard to construction workers in Lansing and East Lansing, updated information from 2014 from Barry T. Hirsch and David A. Macpherson, "Union Membership and Coverage Database from the Current Population Survey: Note," *Industrial and Labor Relations Review*, Vol. 56 No 2 (January 2003), indicates that 16.8% are covered under a collective bargaining agreement. *Exhibit E*.

compensation agreements and alter the work functions of their employees in order to comply with the City's Ordinance. That relief was short lived of course, as the Court of Appeals ruling reinstates these burdens on ABC members. The Michigan Supreme Court has the power to reverse the Court of Appeals and should do so for the reasons explained in this Brief.

ARGUMENT

I. THE COURT OF APPEALS COMMITTED REVERSIBLE ERROR WHEN IT REFUSED TO FOLLOW (AND THEREBY NEGATED) THE LONGSTANDING PRECEDENT OF THE SUPREME COURT IN *LENNANE* HOLDING THAT MUNICIPALITIES DO NOT POSSESS DELEGATED AUTHORITY TO REGULATE THIRD PARTY WAGES OR BENEFITS.

In *Attorney General, ex rel. Lennane v. City of Detroit*, 225 Mich 631; 196 NW 391 (1923), the Michigan Supreme Court ruled that the City of Detroit did not possess the authority to regulate the wage and benefit rates of contractors doing business with the City. Examining the HRCA (the statute through which cities derived their various municipal powers from the Legislature), the Court determined that such regulation was a matter of state concern – not municipal concern – and that, even if viewed as an agent of the State, a municipality does not possess the authority to fix state policy within their municipal boundaries. In short, the Supreme Court ruled that regulating the wages and benefits of private third parties fell outside the City's authority under the HRCA and/or the Michigan Constitution.

Under *Lennane*'s precedent, ABC sued the City of Lansing because the City, through its PWO, requires ABC members to adjust the compensation terms they maintain with their employees whenever they work on City of Lansing funded projects. Consistent with its duty to follow Supreme Court precedent, and seeing the case as “on all fours” with *Lennane*, the trial court granted summary disposition to ABC. On appeal however, the Court of Appeals first

criticized and then rejected *Lennane*. This disregard for Supreme Court precedent should not be allowed to stand. Thus, the Supreme Court should remand the case back to the Court of Appeals and require it to obey the Supreme Court's precedent as articulated in *Lennane*.

A. Standard of Review.

Under the doctrine of *stare decisis*, once a principle of law is determined, it is to be followed in subsequent similar cases. Furthermore, as an inferior court, the court of appeals is bound by the doctrine of *stare decisis* to adhere to precedent of the Michigan Supreme Court. ABC contends that the Court of Appeals committed reversible legal error when it knowingly and deliberately bypassed Michigan Supreme Court precedent in order to reverse the trial court's grant of summary disposition to ABC. The Supreme Court will review and remand cases where the Court of Appeals commits plain error by not applying Supreme Court precedent and, in doing so, reviews such matters *de novo* as a question of law. *People of Michigan v. Lamont Stinnett* 480 Mich 865; 737 NW2d 760 (2007); *Roberts v Mecosta County General Hospital* 466 Mich 57, 62; 642 NW2d 663 (2002). Further, the Supreme Court provides *de novo* review of decisions on summary disposition and questions of constitutional law. *Bronner and Bronner v. City of Brighton*, 495 Mich 209, 220-221; 848 NW2d 380 (2014).

B. Interpreting both the Michigan Constitution and the HRCA, the Michigan Supreme Court ruled in *Lennane* that regulating third party wage and benefit rates is not a municipal concern but, rather, a state concern over which municipalities have no authority to regulate.

Article IV, Section 1, of the Michigan Constitution provides that the Legislature possesses exclusive authority to make and pass laws. Municipalities derive their authority to make and pass laws within their jurisdictions either from a grant of power by the Legislature or through the Constitution itself. *City of Taylor v. Detroit Edison Co.*, 475 Mich 109, 115-116;

715 NW2d 28 (2006). Absent a delegation of such state power however, a municipality does not possess the authority to make and pass laws. *Bivens v. City of Grand Rapids*, 443 Mich 391, 397; 505 NW2d 239 (1993) (“Municipal corporations have no inherent power. They are created by the state and derive their authority from the state.”) (internal citations omitted); *Sinas v. Lansing*, 382 Mich 407, 411; 170 NW2d 23 (1969).

Municipalities like the City of Lansing receive their delegation of the power to make laws from the Michigan Constitution as effectuated through the HRCA, which was enacted in 1909. Under that statute, the State has delegated various powers to municipalities ranging from somewhat predictable authority (e.g., the creation of officers and the ability to issue bonds, borrow money, and acquire property) to the relatively unanticipated (e.g., the power to hold auto racing events and to regulate the speed of locomotives). Realizing it would be impractical (if not impossible) to list every potential municipal power within the statute, the Legislature included within the act the generalized authority to pass ordinances. Importantly, however, that generalized authority is limited to matters of “municipal concern.” This limited power is granted to municipalities pursuant to Section 4(j)(3) of the Act, which states that a home rule city may, in its charter, provide:

[f]or the exercise of all municipal powers in the management and control of municipal property and in the administration of the municipal government, whether such powers be expressly enumerated or not; for any act to advance the interests of the city, the good government and prosperity of the municipality and its inhabitants *and through its regularly constituted authority to pass all laws and ordinances relating to its municipal concerns subject to the constitution and general laws of this state.*

MCL § 117.4(j)(3) (Emphasis added). Because the HRCA does not explicitly provide municipalities the authority to regulate wages and benefits of third parties doing business within their jurisdictions, the first issue in this case is whether Lansing’s PWO constituted a proper

exercise of the prescribed lawmaking authority delegated to the City of Lansing from the State through Section 4(j)(3) of the HRCA. More specifically, the question is whether Lansing's regulation of private employee wage and benefit levels under the PWO properly addresses matters of "municipal concern" or whether its regulation improperly addresses matters of "state concern" over which the City does not have authority.

According to the Michigan Supreme Court, the answer to this seminal question is crystal clear – such regulation is a matter of state concern not within the regulatory reach of municipalities. In *Lennane, supra*, the Michigan Supreme Court determined that a City of Detroit wage regulation (almost identical to Lansing's PWO) exceeded the City of Detroit's authority to promulgate ordinances pursuant to the HRCA. The Supreme Court specifically found that such wage regulations are uniquely a matter of state concern to be regulated exclusively through the state's police power, if at all. According to the Supreme Court, because the City of Detroit exceeded its grant of Home Rule authority and intruded upon the exclusive authority of the State, the City's wage regulation constituted an *ultra vires* act.

The City of Detroit's charter, like Lansing's PWO, required contractors doing business with the City to pay their construction workers at least an established *prevailing wage* as specified by the City. The applicable City of Detroit charter provision stated in relevant part:

No contract for any public work shall be let which shall not, as part of the specification on which contractors shall make their bids, require contractor or subcontractor to pay all persons in his employ doing common labor and engaged in the public work contracted for not less than two dollars and twenty-five cents per diem, to pay all persons in his employ doing the work of a skilled mechanic and engaged on the public work the highest ***prevailing wage*** in that particular grade of work, and to require of such employees the same service day and service week required herein of all city employees. Any contractor who shall have entered into such contract with the city and shall have violated any provision of this section as made a part of his contract shall be debarred from any further contracts for public work, and any contract let to him contrary to this provision shall be void. Whenever it shall appear that any employee of any contractor for

public work engaged thereon shall have received less than the compensation herein provided, the common council may cause to be paid to him such deficit as shall be due him and shall cause the amount so paid to be deducted from the balance due to the contractor from the city.

(Emphasis added). *Id.* at 634-635.⁵

The Attorney General, on behalf of numerous contractors, filed suit seeking to prohibit the City of Detroit from enforcing the charter provision. *Id.* at 633. The Attorney General argued that the provisions of the Charter violated the Michigan Constitution so that the City of Detroit lacked the authority to regulate contractor wage rates thus rendering the charter provisions *ultra vires* and, therefore, unenforceable. *Id.* at 635. The trial court agreed with the Attorney General's arguments and granted the relief sought. *Id.*

On direct appeal, the Michigan Supreme Court determined that the Charter constituted an *ultra vires* act because the City of Detroit had not been granted such power under either the State Constitution or the HRCA. According to the Court, the Michigan Constitution did not provide municipalities *carte blanche* power to pass and maintain laws the same as the sovereign state. The Court first recognized that the State may have certain "state concerns" and municipalities may have unique "municipal concerns," but that each is not to intrude upon the power possessed by the other. *Id.* at 636. The Court also recognized that a municipality could act as "an agent of the State" in certain instances, such as in matters of public health and police activities, *Id.* at 637, but that the agency relationship does not allow a municipality to fix public policy for the State. *Id.* at 638. Finally, the Court reasoned that the general "police power" rests with the State and that only where a delegation of such power has been made in some way to municipalities could

⁵ The City of Detroit also maintained an ordinance which was nearly identical to the charter provision. Because the charter and ordinance language were nearly identical, the Court declined to quote the ordinance separately in its decision. *Lennane* at 633. Thus, for all intents and purposes, the Court used the word "charter" as encompassing both regulations.

municipalities engage in police power regulation. *Id.*

As to the specific question before it – whether a municipality may regulate third party wages and benefits – the Court ruled as follows:

In the provisions under consideration the city has undertaken to exercise the police power not only over matters of municipal concern but also over matters of State concern; it has undertaken not only to fix a public policy for its activities which are purely local but also for its activities as an arm of the State. The provisions apply alike to local activities and State activities. *If we assume, as we have for the purposes of the case, without deciding the question, that the city possesses such of the police power of the State as may be necessary to permit it to legislate upon matters of municipal concern, it does not follow that it possesses all the police power of the sovereign so as to enable it to legislate generally in fixing a public policy in matters of State concern. This power has not been given it either by the Constitution or the home-rule act.*

(Emphasis added). *Id.* at 640-641. Thus, by enacting its prevailing wage requirements of contractors doing work for the City, the City of Detroit was determined by the Supreme Court to have overstepped its bounds of authority under the Michigan Constitution as effectuated through the HRCA.

C. Since Lansing's PWO is precisely the same type of regulation as that found to be outside the scope of municipal authority as determined by the Supreme Court in *Lennane*, the Court of Appeals was obligated by the doctrine of *stare decisis* to follow it.

Whether the wage rates of private third parties are within the power of a municipality to regulate has clearly been decided by the Michigan Supreme Court. *Lennane* unequivocally held that the level of wages paid to employees of a third party is *not* a matter of municipal concern over which cities have control. Rather, it is a matter of state concern *not* to be shared with municipalities. Because *Lennane* is binding precedent, the Court of Appeals should not have elevated its judgment over that of the Supreme Court. The Court of Appeals should have recognized that it was bound by *stare decisis* to affirm the lower court's ruling that Lansing's

PWO is *ultra vires* and unenforceable.

A review of the facts of *Lennane* shows it to be virtually indistinguishable from the present case. The Detroit charter (and identical ordinance) sought to prescribe a particular wage rate of contractors doing work for the City of Detroit. The Lansing PWO likewise prescribes particular wage rates for contractors performing work for the City of Lansing. The only difference is that the City of Lansing PWO goes one step further in its regulation – it also sets minimum fringe benefit levels contractors must provide their employees working on City-funded projects.

The relevant Constitutional provisions at issue in both cases are also virtually the same.

The Michigan Constitution at the time *Lennane* was decided provided that:

[u]nder such general laws, the electors of each city and village shall have power and authority to frame, adopt and amend its charter and to amend an existing charter of the city or village heretofore granted or passed by the legislature for the government of the city or village, and, through its regularly constituted authority, to pass all laws and ordinances relating to its municipal concerns, subject to the Constitution and general laws of this State.

Const 1908, Art 8, §21. The current 1963 Constitutional provision at issue reads almost identically to the predecessor 1908 Constitution. It provides:

Under general laws the electors of each city and village shall have power and authority to frame, adopt and amend its charter and to amend an existing charter of the city or village heretofore granted or enacted by the legislature for the government of the city or village. Each such city and village shall have power to adopt resolutions and ordinances relating to its municipal concerns, property and government, subject to the constitution and law. *No enumeration of powers granted to cities and villages in this constitution shall limit or restrict the general grant of authority conferred by this section.*

Const 1963, Art 7, § 22 (Emphasis added to show difference).

Finally, and most significantly for this Court's determination, the HRCA reads *exactly* the same now as it did when *Lennane* was decided. The applicable language of the HRCA then

and now reads:

[f]or the exercise of all municipal powers in the management and control of municipal property and in the administration of the municipal government, whether such powers be expressly enumerated or not; for any act to advance the interests of the city, the good government and prosperity of the municipality and its inhabitants and through its regularly constituted authority to pass all laws and ordinances relating to its municipal concerns subject to the Constitution and general laws of this State.

1 Comp. Laws 1915, § 3307(t) (Emphasis added).

As demonstrated above, the only differences between *Lennane* and the present case is that (1) Lansing's power grab (wages and benefits) was more extensive than that attempted by the City of Detroit in *Lennane* (wages only) and (2) the Michigan Constitution now provides that any enumeration of municipal powers in the Constitution is not be interpreted as limiting any other powers. Under *Lennane*, Detroit was without authority to regulate even a basic wage scheme, let alone a complicated fringe benefit system. Thus, as to the first "difference" between the cases, the fact that Lansing has sought to regulate *additional* areas of compensation provided by contractors to their employees makes the impermissible regulation even more egregious under the *Lennane* analysis. If anything, it creates further reason to strike down the regulation. It certainly does *not* create a distinction taking the present case out from under *Lennane*'s holding.

The second "difference" is also meaningless. There certainly is an additional sentence in the Michigan Constitution providing that any numbered listing of municipal powers in the Constitution is not to be read as limiting the general grant of municipal authority found in Article 7, Section 22 of the 1963 Constitution. Just as certainly, however, there is no enumerated or otherwise explicitly listed set of municipal powers in the Constitution at issue in this case, just as there was no particular list of constitutional powers at issue in *Lennane*. Even if there were a specific list of municipal powers in the Constitution hypothetically at issue here, ABC has not

and would not argue that certain municipal powers expressed in the Constitution impliedly reject other potential powers of a municipality (“*expressio unius est exclusion alterius*” – the express mention of items excludes all others). Neither in *Lennane* nor in the present case has the complaining party argued that a numbered list of specific municipal powers somehow foreclose the municipality from regulating in some other area. Specifically, neither in *Lennane* nor in the present case, has either plaintiff asserted that regulation of wages and benefits paid by contractors performing work for the municipality is illegitimate because a list of enumerated municipal powers in the 1908 or 1963 Constitutions impliedly rejects non-enumerated supposed powers. Thus, this added language to the 1963 Constitution does not provide a meaningful distinction between the *Lennane* case involving the City of Detroit and the present case involving the City of Lansing.

Because there is no meaningful difference between *Lennane* and the present case, the Court of Appeals was obliged to follow it. Had it done so, it would certainly have ruled that the City of Lansing overstepped its authority under the Constitution and the HRCA by enacting its PWO with striking similarity to the regulation struck down in *Lennane*.

In short, the Michigan Supreme Court has settled the issue of whether the State’s police power to regulate wages (unquestionably a matter of general state concern) has been delegated to municipalities by either the Constitution or HRCA. The Court has spoken plainly in the negative. Municipalities may *not* regulate wages or benefit rates of contractors or other businesses by way of ordinance or any other means. The black letter rule of law established by the Michigan Supreme Court in its 1923 *Lennane* decision remains true today. Since *Lennane* and the present case are indistinguishable – indeed, they are the mirror image of each other, the Court of Appeals committed reversible error by refusing to apply *Lennane*’s holding to ABC’s

case before it.

- D. Since only the Supreme Court can judicially determine whether its holdings are no longer valid, the majority panel of the Court of Appeals violated the principle of *stare decisis* by concluding that the Supreme Court's reasoning in *Lennane* has been superseded by case law and is therefore obsolete.

The majority of the Court of Appeals ruled that the Supreme Court's decision in *Lennane* is obsolete and inapplicable. But that is not within its power to decide. Case law is abundantly clear that the Court of Appeals cannot overrule Supreme Court precedent. *Lubertha Ratliff v. General Motors Corp.*, 127 Mich App 410, 416-417; 339 NW2d 196 (1983):

The issue raised by the defendant in essence asks this Court to address the constitutionality of [a prior Michigan Supreme Court decision]. This we decline to do. ***This Court is bound by the doctrine of stare decisis and is powerless to overturn a decision of the Supreme Court.*** *Schwartz v. City of Flint* (after remand), 120 Mich App 449, 462; 329 NW2d 26 (1982); *People v. Recorder's Court Judge #2*, 73 Mich App 156, 162; 250 NW2d 812 (1977), lv den 400 Mich 825 (1977).

(Emphasis added). It is, therefore, black letter law in Michigan that only the Supreme Court has the power to decide whether its precedent has become obsolete and the lower courts are strictly prohibited from substituting their judgment for that of a higher court.

Significantly, this isn't the first time the Court of Appeals has examined a case involving *Lennane*, but it is the first time the Court of Appeals has deliberately bypassed its holding. In 2009, another panel of the Court of Appeals was presented a case involving the City of Detroit's attempt to enforce a "living wage" ordinance. *Rudolph v. Guardian Protective Servs.*, 2009 Mich App LEXIS 1989 (2009), (unpublished). *Appendix at pp. 17A-19A*. Unlike the current panel, however, the *Rudolph* panel recognized the operation of *stare decisis* and ruled that *Lennane* constituted binding precedent on the matter and that the Court had no alternative but to rule the Detroit ordinance *ultra vires* and, therefore, unenforceable.

In *Rudolph*, the trial court came face to face with the Supreme Court's decision in *Lennane*. Finding the case to be directly on point, it ruled that it was bound by *stare decisis* to find the living wage ordinance invalid. *Id.* at *1. On appeal, the Court of Appeals also addressed its obligation to the doctrine of *stare decisis*. The Court stated that *stare decisis* requires a court "to reach the same result when presented with the same or substantially similar issues in another case with different parties," citing *Topps-Toeller, Inc. v. City of Lansing*, 47 Mich App 720; 209 NW2d 843 (1973). *Id.* at *2. The Court of Appeals also referenced that *stare decisis* mandates that all lower courts are bound by a decision issued by a majority of the Michigan Supreme Court and that such courts "remain bound by our Supreme Court's precedent until such time as the Supreme Court overrules or modifies it[.]" citing *People v. Mitchell*, 428 Mich 364, 369; 408 NW2d 798 (1987) and *State Treasurer v. Sprague*, 284 Mich App 235, 242; 772 NW2d 452 (2009). *Id.* Examining whether Detroit's implementation of a wage ordinance constituted a valid exercise of its police power, the Court recognized that the regulation struck down in *Lennane* and the regulation before it were virtually indistinguishable as "both [were] clearly intended to accomplish substantially similar goals and would entail exercise of the same power." *Id.* at *3. Consequently, the Court of Appeals held that *stare decisis* mandated the conclusion that the City of Detroit's living wage ordinance was unenforceable as an *ultra vires* act. *Id.*

Here, the City of Lansing has attempted to accomplish markedly comparable goals utilizing the same means as failed in *Lennane*. When ABC sued, Ingham County Circuit Court Judge Clinton Canady III correctly determined, as the trial court did in *Rudolph*, that *Lennane* constitutes binding precedent on the issue of whether municipal power extends to regulation of third party wage and benefit rates. *Appendix at p. 25A*. Yet, on appeal, two members of this

panel of the Court of Appeals diverged from every court examining the issue⁶ and instead declared the Supreme Court's reasoning in *Lennane* as longer valid or, in the words of the Court, that *Lennane*'s reasoning has been "superseded." *Appendix at p. 34A*. But whether the lower court labels directly applicable precedent of a higher court as having been "superseded" or as "obsolete," an impermissible "overruling" of the higher court's precedent has occurred and the controlling principle of *stare decisis* is violated. Regardless of the subtle terms used by the majority panel of the Court of Appeals, the lower court did not have the authority to bypass Supreme Court precedent as it has done here.

The binding effect of *Lennane* must be applied despite the majority panel's conclusion that the Supreme Court's holding is obsolete due to the passage of time along with changes in constitutional framework from 1908 to 1963. Indeed, "[i]f a precedent of [the Michigan Supreme Court] has direct application in a case, yet appears to rest on reasons rejected in some other line of decisions, the Court of Appeals [or trial courts] should follow the case which directly controls, leaving to [the Michigan Supreme Court] the prerogative of overruling its own

⁶ Because *Rudolph* is not a published decision, it obviously was not binding on this current panel of the Court of Appeals. Still, this fact does not negate the obvious persuasive value of the decision. MCR 7.215. *Rudolph*'s holding should have been highly persuasive to this panel given the limited case law on the subject and the fact that the factual and legal issues inherent in *Rudolph* constituted the mirror image of this case. *People v. Green*, 260 Mich App 710, 720 n. 5; 680 NW2d 477 (2004) (unpublished decision properly viewed as persuasive in light of the limited case law in a specific area); *Paris Meadows, LLC v. City of Kentwood*, 287 Mich App 136, 145 n.3; 783 NW2d 133 (2010) (factually similar unpublished case law "provides instructive and persuasive value"). Additionally, the fact that *Rudolph* was denied leave to appeal to the Supreme Court leads to the conclusion that the Supreme Court is satisfied with its decision in *Lennane*. *Rudolph v. Guardian Protective Servs.*, 486 Mich 868; 780 NW2d 571 (2010). Thus, this panel of the Court of Appeals should have paid heed to *Rudolph* and similarly held that the Supreme Court's decision in *Lennane* has not been overruled and remains binding precedent on the issue of whether municipalities have the authority to regulate wage and/or benefit rates of third parties within their jurisdictions. Because it did not, the Supreme Court should grant leave and reverse.

decisions.” *Rodriguez de Quijas v. Shearson/American Express, Inc.*, 490 US 477, 484 (1989).⁷ Thus, even though the majority of the panel was inclined to agree with the City of Lansing’s underlying position on what the law *should be* in regard to the scope of municipal concerns as the City currently believes them to be, the Court of Appeals was nevertheless bound as a matter of law to follow the Supreme Court’s unambiguous holding in *Lennane* just as the trial court and appellate court did in *Rudolph*, *Appendix at pp. 17A - 19A*, and as Judge Canady III did, *Appendix at p. 25A*, and Dissenting Judge Sawyer would have done in the present case. *Appendix at pp. 39A – 40A*.

The Michigan Supreme Court has made it absolutely clear that lower courts do not have the authority to substitute their judgment for that of a higher court and that only the Supreme Court may overrule its own decisions. In *Boyd v. W.G. Wade Shows*, 443 Mich 515; 505 NW2d 544 (1993), an Illinois resident, Willie Boyd, entered into an employment contract in Michigan, but executed his job duties out of state. While working in Indiana, Boyd suffered a personal injury and died. Boyd’s widow filed for workers’ compensation benefits in Michigan, but her claim was denied because Boyd was not a Michigan resident. The Workers’ Compensation Appellate Commission (WCAC) based its decision on the plain language of Section 845 of the Workers’ Compensation Act which stated:

The bureau shall have jurisdiction over all controversies arising out of injuries suffered outside this state where the injured employee is a *resident of this state* at the time of injury and the contract of hire was made in this state.

Id. at 517 (emphasis added). The Court of Appeals denied leave to appeal. In denying the widow benefits, both the WCAC and the Court of Appeals effectively ignored precedent from

⁷ Discussing *Rodriguez*, a judge of the Michigan Court of Appeals referred this doctrine as “vertical *stare decisis*.” *Bora Petrovski v. Vasko Nestorovski*, 283 Mich App 177, 207-208; 769 NW2d 720 (2009).

the Michigan Supreme Court in *Roberts v. IXL Glass*, 259 Mich 644; 244 NW 188 (1932). In that underlying case, the Michigan Supreme Court interpreted the predecessor Workers' Compensation Act to provide coverage to injured employees regardless of whether they were Michigan residents so long as their contract of employment was entered into in Michigan. *Boyd* at 517-519.

On appeal, the Supreme Court noted that various decisions of the Court of Appeals had “begun to interpret Section 845 in contravention of *Roberts*,” and that although the relevant portion of the Act dealing with the residency requirement (Section 845) remained unchanged, these decisions were based on the fact that the overall Workers' Compensation Act had been amended in various, substantial ways after *Roberts* was decided. *Id.* at 521-523. The Michigan Supreme Court characterized the various Court of Appeals' decisions as taking the position that *Roberts* was “no longer valid precedent because it [was] ‘too old.’” *Id.* at 522-523. The Supreme Court then rebuked the Court of Appeals attempt at overruling *Roberts*:

[I]t is the Supreme Court's obligation to overrule or modify case law if it becomes obsolete, and until this Court takes such action, the Court of Appeals and all lower courts are bound by that authority. While the Court of Appeals may properly express its belief that a decision of this Court was wrongly decided or is no longer viable, that conclusion does not excuse the Court of Appeals from applying the decision to the case before it. Because this Court has never overruled Roberts, it remains valid precedent. The rule of law regarding extraterritorial jurisdiction as expressed by Roberts should have been applied by the bureau in the present case.

Id. (Internal citations omitted) (Emphasis added).⁸ Thereafter, in a display of *stare decisis* in action, the Michigan Supreme Court in *Karaczewski v. Farbman Stein & Co.*, 478 Mich. 28; 732 NW2d 56 (2007) overruled *Boyd's* underlying holding and changed the law in Michigan to require an employee to be a Michigan resident to recover workers' compensation benefits. Juxtaposing *Karaczewski* to *Boyd* reveals the proper way the law develops in Michigan.

Conspicuously absent from the Opinion of the majority of the Court of Appeals panel is any mention of the *Boyd* case, despite the case having been briefed substantially by ABC. Instead, the majority of the panel relies exclusively on a prior decision of the Court of Appeals, *Adams Outdoor Advertising, Inc., v. City of Holland*, 234 Mich App 681; 600 NW2d 339 (1999) ("*Adams/Holland*") for the contrary contention that the Court of Appeals has the authority to declare a Supreme Court case directly on point to nonetheless be antiquated and irrelevant based on a rejection of reasoning of the Supreme Court in the underlying case. *Appendix at pp. 26A – 38A.* But the majority is wrong. A proper reading of *Adams/Holland* demonstrates that the Court of Appeals was relying on the *precise pronouncements of the Supreme Court* as to whether its prior rulings were still applicable under a HRCA analysis. In no way does the *Adams/Holland* case stand for the proposition that the *Court of Appeals* may determine a Supreme Court case no longer valid based on the lower Court's analysis of the Supreme Court's reasoning in other cases.

⁸ *Boyd* is also instructive for the point that, absent legislative action to overturn court precedent, lawmakers are presumed to have adopted court precedent interpreting a statute, particularly a statute which has been amended since the interpretation. Citing *Consumers Power Co v. Muskegon Co.*, 346 Mich 243, 251, 665; 78 NW2d 223 (1956), the Supreme Court in *Boyd* stated at 548: "... the doctrine of *stare decisis* applies with full force to decisions construing statutes or ordinances, especially where the Legislature acquiesces in the Court's construction through the continued use of or failure to change the language of a construed statute" and that "the principles of *stare decisis* are particularly applicable when the Legislature has reenacted the statute language without change." Again, the HRCA has been amended numerous times since 1923 when *Lennane* was decided.

In *Adams/Holland*, the plaintiff billboard company sued the City of Holland alleging its ordinance aimed at regulating existing billboards and forbidding new billboards within the city limits violated the HRCA and/or the zoning enabling act. *Id.* at 686. After discussing that the HRCA is to be viewed liberally toward the grant of municipal power, the Court of Appeals then analyzed several Supreme Court cases specifically involving the regulation of billboards. It identified that two Supreme Court decisions, *DeMull v. City of Howell*, 368 Mich 242; 118 NW2d 232 (1962) and *Central Advertising Co. v. Ann Arbor*, 391 Mich 533; 218 NW2d 27 (1974) had set forth rules that municipalities do not have the authority to engage in particular types of billboard regulation.⁹ It also identified that the most recent Supreme Court case on the subject, *Adams Outdoor Advertising v. East Lansing*, 439 Mich 209; 483 NW2d 38 (1992) (“*Adams/East Lansing*”) had ruled that *DeMull*, *supra*, did not foreclose whether the HRCA provided some regulatory power over billboards and, further, that the act impliedly provided the City of East Lansing the authority to require removal of existing, non-conforming billboards over time. *Adams/Holland* at 688.¹⁰ Since the case before the Court of Appeals dealt with the City of Holland’s ordinance prohibiting new billboards and regulating existing billboards (as opposed to outlawing them), the Court of Appeals ruled consistent with the Supreme Court’s holding in *Adams/East Lansing* that the City of Holland possessed the power to maintain its ordinance. Since the Supreme Court decision in *Central Advertising* dealt with a municipal ordinance

⁹ In *DeMull*, the Supreme Court ruled that the zoning act prohibited cities from restricting the use of existing billboards. *DeMull* at 250-251. In *Central Advertising*, the Supreme Court ruled that, while the HRCA allows a city to regulate billboards, it does not provide authority for cities to effectively ban billboards altogether. *Central Advertising* at 536.

¹⁰ There is no discussion in *Adams/East Lansing* concerning the Supreme Court’s prior ruling in *Central Advertising*, *supra*. Perhaps it is because *Central Advertising* concerned regulation so pervasive that it effectively prohibited any existing billboards whatsoever – a different matter than what was before the Supreme Court in *Adams/East Lansing*.

effectively eliminating existing billboards altogether, the Court of Appeals logically concluded that the case was limited to its particular facts and not relevant to the case at hand. *Adams/Holland* at 689-690.

Clearly, the Court of Appeals in *Adams/Holland* merely applied specific Supreme Court precedent to the facts before it. More importantly, the Court of Appeals did *not* render any pronouncement of the Supreme Court to be “inapplicable” to subsequent cases on point under the rationale that the Supreme Court’s prior reasoning had become outdated or impliedly rejected by other decisions. Indeed, it specifically stated otherwise when it concluded that “... we (the Court of Appeals) limit *Central Advertising* to its facts and narrow holding. *Id.* at 690.

The majority of the Court of Appeals panel in the present case cites to *Adams/Holland* for the proposition that “the reasoning employed in *Lennane* should not be applied in the case at bar.” *Appendix at p. 34A*. But that conclusion bears no resemblance to the *Adams/Holland* case. Actually, *Adams/Holland* stands for the proposition ABC has made throughout this matter – that the lower courts must follow specific Supreme Court precedent in factually similar cases and that only the Supreme Court can determine whether its prior precedent is no longer valid.

Finally, the majority makes an unconvincing statement that it really isn’t jettisoning *Lennane* to the garbage bin in prevailing wage ordinance cases but, rather, has simply recognized that “the doctrine of *stare decisis* is not applicable where the controlling authorities have changed after the Supreme Court issues its decision in *Lennane*.” *Appendix at p. 34A*. But, as is discussed *infra*, there has not been a change in “controlling authorities” in cases involving prevailing wage ordinances. The only cases on point – *Lennane* and *Rudolph* – hold that prevailing wage regulation is a matter of state concern over which municipalities do not have authority to regulate. The majority of the panel has not identified a single case – let alone a

Supreme Court case – identifying that prevailing wage ordinances are proper subjects of local concern under the HRCA.

At the end of the day, the majority of the Court of Appeals panel has ruled similar to the panel in the ill-fated *Boyd* case. For whatever reason, the two person majority on this Court of Appeals panel believes the lower Court sits at the same level as that of the Michigan Supreme Court. But, of course, it does not. As the Supreme Court articulated in *Boyd*, it is the Supreme Court's obligation – *not the Court of Appeals' prerogative* – to “overrule or modify case law if it becomes obsolete.” *Id.* at 522-523. Just as the *Roberts* case holding had to be followed by the lower courts in *Boyd*, the *Lennane* case holding should have been followed by this panel of the Court of Appeals, whether it agrees with the *Lennane* decision or not. Its failure to do so constitutes reversible error. It is as Judge Sawyer wrote in his dissent:

[E]ven if I were to accept all of the majority's arguments why the ordinance in this case is within defendant's authority to adopt were it not for the holding in *Lennane*, this Court would lack the authority to uphold the ordinance. To do so would overstep our bounds. It is not for us to reject the continued viability of *Lennane*. It is for the defendant to persuade the Supreme Court to do so.

Appendix at p. 40A.

In short, even though the majority of this panel of the Court of Appeals believes that evolution of the Michigan Constitution and general interpretation of the powers granted municipalities under the HRCA have negated the continued viability of *Lennane*, the Court of Appeals was nevertheless bound to follow *Lennane* under the doctrine of vertical *stare decisis*. It refused. ***Accordingly, the Supreme Court should remand the case back to the Court of Appeals with explicit instructions to apply Lennane's holding to the facts of this case.***

II. EVEN IF THE SUPREME COURT WERE TO RECONSIDER THE SUBSTANCE OF ITS RULING IN *LENNANE* (WHICH IT NEED NOT DO SINCE REMAND IS APPROPRIATE), THE COURT SHOULD NOT OVERTURN ITS LONGSTANDING PRECEDENT THAT CITIES LACK THE AUTHORITY TO REGULATE THIRD PARTY WAGE AND FRINGE BENEFIT RATES.

The appropriate result in this case is for the Supreme Court to protect the judicial process in the same way it did in *Boyd, supra*, by rebuking the Court of Appeals for overstepping its bounds. It is therefore respectfully requested that the Supreme Court remand the case back to the Court of Appeals for a ruling consistent with the Supreme Court's holding in *Lennane*. Indeed, the Supreme Court has already considered leave to appeal in the predecessor *Rudolph* case, a case directly on point with this case, and decided not to grant leave and to allow *Lennane* to stand. *Rudolph, supra*, 486 Mich 868. Nevertheless, because the Supreme Court has requested briefing on whether it should review of its own precedent in *Lennane*, ABC provides the following analysis demonstrating why the Court should *not* overrule *Lennane*.

A. Standard of Review.

ABC believes it would be both unnecessary and improper for the Supreme Court to consider reversing its precedent directly on point with the case presented. Nevertheless, should the Court consider to do so, it would review the matter *de novo* as a question of law. *Andre Bezeau v. Palace Sports & Entertainment*, 487 Mich 455, 461; 795 NW2d 797 (2010).

B. While the Michigan Supreme Court (unlike the Court of Appeals) obviously maintains the power to overrule its own precedent, all appropriate factors weigh in favor of maintaining its precedent in *Lennane*.

In *Robinson v. City of Detroit*, 462 Mich 439; 613 NW2d 307 (2000), the Supreme Court explained the appropriate, indeed only, method for potentially overruling its own precedent. It elucidated a four part analysis: Was the case wrongly decided in the first instance? Does the

case defy practical workability? Do significant reliance interests preclude overturning the case? And, have changes in the law rendered the decision unjustified? *Id.* at 464. On balance, these four factors weigh in favor of the Supreme Court not overruling *Lennane*.

Lennane was not wrongly decided.

First, there is no compelling evidence that *Lennane* was wrongly decided. The Supreme Court in *Lennane* looked to the police power of the State and properly concluded that the Michigan Constitution and the HRCA provide municipalities the power to act not only in regard to its purely local concerns, but also as an agent of the State. Still, the Court ruled a municipality may not fix public policy for the State unless provided the power to do so through some identifiable delegation. This holding is sound. Indeed, the Michigan Supreme Court has ruled as recently as 2006 that municipalities derive their authority to make and pass laws within their jurisdictions either from a grant of power by the Legislature or through the Constitution itself. *City of Taylor, supra* at 115-116. Looking to the Michigan Constitution and the HRCA, *and applying a liberal focus to both*, the Court previously concluded that no grant of authority to cities to regulate third party wage rates existed. Nothing in that decision is patently erroneous. Indeed, the ruling has stood unchallenged for over 90 years.

Moreover, consistent with *Lennane*, the State has previously exerted its state-wide public policy over minimum wage rates by enacting a statewide minimum wage and overtime law. See Michigan Minimum Wage Law, PA 154 of 1964. In fact, the State recently repealed that law and wrote a new one. See Workforce Opportunity Wage Act, PA 138 of 2014. If in furtherance of its public policy aims the State wished to carve out special areas of the state for a different set of wage rules or standards, it could certainly do so in either statute. It has not previously and it

did not recently. The result is a uniform and easily understood law with which all citizens, including corporations, can comply without difficulty.

The state public policy protected by *Lennane* also places no restriction whatsoever on municipalities in their proprietary role. As the majority of the Court of Appeals panel pointed out through reference to four different cases, the Michigan Supreme Court has acknowledged the right of cities to regulate the compensation terms of its own public employees. *Brimmer*, *Gildersleeve*, *Kane*, and *Olson*, discussed substantively, *infra*, at FN 12. See also, *Appendix at pp. 32A-34A*.

Even if *Lennane* were considered to be wrongly decided (which it was not), “[t]he mere fact that an earlier case was wrongly decided does not mean overruling it is invariably appropriate.” *Robinson* at 465. The other factors of the *Robinson* test demonstrate why the Supreme Court should not overrule it.

Lennane does not “defy practical workability.”

The rule that only the State holds the power to regulate third party wage and benefit rates is obviously simple to administer. Indeed, as explained above, it is an ideal rule. All employees and business can take stock in the fact that they need only concern themselves with state regulation in such matters and don’t have to worry about a labyrinth of local laws affecting their employment circumstances. This is particularly true in the construction industry. In the construction industry where ABC members make their living, companies perform many jobs in many cities every day. Construction contractors often transition employees from one project in one city to another project in another city all in a single day. Under *Lennane*, they can do so confident that the terms and conditions of employment they maintain with those employees will remain intact. On the other hand, if *Lennane* were reversed and each city were allowed to

determine which wages and benefits and at what amounts must be paid to construction employees within their jurisdictions, the result would be an unworkable hodgepodge of laws across the landscape of the state.¹¹ This would effectively kill the universal construction industry practice of performing work in several cities on a regular basis. Thus, the *Lennane* ruling does not defy practical workability – it enhances it.

There are significant reliance interests precluding the overturning of *Lennane*.

In *Robinson*, the Supreme Court indicated that the purpose of this inquiry is to prevent “practical, real-world dislocations.” *Id.* at 466. Overturning *Lennane* would exacerbate practical, real-world dislocations because it would permit every municipality with home rule power the ability to set the wage and benefit rates for all construction contractors doing work on their construction projects. As alluded to in the paragraph above, this could result in dozens if not hundreds of prevailing wage ordinances across the state, each with potentially different wage and benefit rates or schemes and each with potentially different types of worker classifications to which separate wage and benefit particulars would have to be applied.

Beyond prevailing wage ordinances applicable only to construction contractors, overturning *Lennane* would grant to cities the ability to regulate any and all persons and businesses within their jurisdictions relative to their wages and benefits under so-called “living wage ordinances” or similar laws. The patchwork of inconsistent laws in this regard would wreak havoc across the state. The State has already set public policy rules for determining when and how wage payments to employees are to be made. See *Michigan Payment of Wages and*

¹¹ Consider the administrative nightmare: A contractor assigning some of his employees on a prevailing wage project in Lansing on Monday, a prevailing wage project in Ann Arbor on Tuesday, and on a project back in his home town on Wednesday would most likely have to alter the pay and benefit package of those employees three times in three days.

Fringe Benefits Act, PA 390 of 1978. If *Lennane* were to be overruled, these areas would also become fertile ground for municipalities to regulate. Thus, any employer with multiple locations or any business with a mobile workforce would become subject to practical dislocations. For example, an ABC contractor with multiple employees transitioning in a week's time from project to project in Bay City, Midland, and Saginaw, could be forced to comply with not only the State's wage regulation statutes concerning minimum wages and manner of payment, but also with three additional sets of varying wage rules ranging from rates of pay, manner of payment, timing of payment, deductions from payment, and virtually any other compensation rule the cities might enact.

Beyond the payment of wages, where would the municipal regulation of benefits end? What would prevent municipalities from passing miniature Family and Medical Leave laws applicable to any business within its jurisdiction? A construction contractor doing work in several cities, each with different, peculiar employee leave rules, would have little hope of juggling a convoluted system like that. Of course, the list of employee benefits and other employment related rules a city might wish to regulate is virtually endless – employee attendance and tardiness, breaks and meal-times, discipline, personnel records, seniority, layoff and recall, promotions and transfers, hiring and exit interviews, tuition reimbursement, holiday recognition, vacation accrual, bereavement, dress codes, drug testing, etc. A contractor or other employer performing work in more than one city would be unable to cope with the various standards and enforcement schemes each city might concoct equal to or beyond state or federal law standards. Thus, in order to prevent these kinds of real-world dislocations, the Court should not overturn *Lennane's* holding that the regulation of third party wages and benefits is a matter of state

concern only and that municipalities are not empowered to fix state public policy in that regard as an agent for the State.

There have not been changes in the law sufficient to render *Lennane* unjustified.

While not couched in terms of the Supreme Court's *Robinson* test for altering Supreme Court precedent, it is on this issue – a change in the legal landscape – where the majority of the Court of Appeals panel agreed with the Defendant/Appellees that *Lennane* should not control the outcome of this case. The Court of Appeals essentially ruled with three-step reasoning; (1) the Michigan Constitution of 1963 provides for a more liberal reading of powers granted to municipalities as compared to that under the Constitution of 1908, (2) this liberal reading has resulted in more municipal powers being recognized over time, and (3) the Supreme Court's holding in *Lennane* is therefore no longer applicable. *Appendix at p. 34A*. Yet, whatever differences exist in relation to the focal lens by which Michigan courts are to view municipal powers, the fact remains that a municipality must be granted power from the Legislature in some way for the power to exist. On that critical front, there simply is not sufficient legal basis to conclude that the Constitutional adjustment in focus has clearly rendered *Lennane* to be bad law.

The basis for the majority's opinion that *Lennane* has been "superseded" and is therefore "inapplicable," rests on the fact that the Michigan Constitution was amended 1963 to provide for liberal construction of municipal power. The majority opinion cites to cases which it believes show the Supreme Court acknowledging the Constitutional adjustment has had the effect of rendering *Lennane* obsolete. *Appendix at pp. 31A – 34A*. Yet, as is pointed out by dissenting Judge David H. Sawyer in his opinion, what the majority overlooks is the fact that any purported power must still attach to a municipal concern in the first instance. *Appendix at p. 39A*. In every case cited by the majority and/or by the City of Lansing, the grant of power was clearly related to

a municipal concern as expressed in a statute or as determined by a court. Of course, when it comes to the regulation of third party wage and benefit rates by a municipality, there has never been any such expression or finding contrary to the Supreme Court's determination in *Lennane*.

While it is certainly true this Court has recognized that municipalities enjoy an expanded view of their municipal powers, see *AFSCME v. Detroit*, 468 Mich 388, 410; 662 NW2d 695 (2003) and *Rental Property Owners Association of Kent County v. City of Grand Rapids*, 455 Mich 246; 566 NW2d 517 (1997) *Appendix at p. 31A*, that view is not as expansive as the lower court believes. In *AFSCME*, *supra*, the majority's quote from the Supreme Court case ("... home rule cities enjoy not only those powers specifically granted, but they *may* also exercise all powers not expressly denied" (emphasis added)) clearly shows through use of the word "may," that the municipal power is qualified power, meaning it depends upon other circumstances. In *Rental Property*, *supra*, the Supreme Court provided the answer to what those circumstances are. There, the Supreme Court stated quite specifically that "[t]he enactment and enforcement of ordinances related to *municipal concerns* is a valid exercise of municipal power as long as the ordinance does not conflict with the constitution or general laws." *Id.* at 253 (Emphasis added) (Internal citation omitted). The Supreme Court's quotation from the HRCA reveals an important limitation on municipal power – the enactment and enforcement of municipal regulations must still be tied to a municipality's "*municipal concerns*," as opposed to *state concerns*. If the regulation is a state concern and not a municipal concern, the regulation is not a valid exercise of municipal power; rather the regulation evidences an unlawful usurpation of power. Thus, the powers of the State do not belong equally to a municipality. The HRCA's mandate that the matter constitute a legitimate "municipal concern" still remains as the lynchpin for municipal power.

The City of Lansing and the majority panel also offer misplaced reliance on *City of Taylor, supra*, at 116, *Detroit v. Walker*, 445 Mich 682, 690; 520 NW2d 135 (1994) and *Rental Property, supra* at 253, for the proposition that the HRCA grants general rights and powers, subject only to certain enumerated restrictions. In essence, they seem to maintain that municipal power need not have its origin in a delegation of power from the State, so that the City of Lansing may regulate third party wages because no specific law explicitly prevents Lansing from doing so. *Appendix at pp. 26A – 38A*. But again, they are wrong. Municipalities are empowered to regulate only on matters linked to a grant of authority from the State. *Bivens, supra* at 397 (“An ordinance enacted by the governing body of a home rule city is valid only if it is consistent with the powers conferred by the state in its constitution and statutes.”). *Detroit v. Walker, supra*, reiterates this point. There, the Supreme Court specifically stated that municipal power continues to be limited in the same basic way as was true in *Lennane*, that is, “cities are empowered to form for themselves a plan of government suited to their unique needs and, *upon local matters*, exercise the treasured right of self-governance.” *Id.* at 690 (Emphasis added). From this quote, it is clear that a municipal concern must be readily apparent in order for a delegation of power from the State can be found to exist.

The City of Lansing and the majority of the Court of Appeals panel also err in their understanding of municipal authority to wield state police power. Initially, the majority of the panel correctly contends that courts have recognized that, “unless expressly limited by statute or our Constitution, the police power possessed by cities is of the same scope as the police power possessed by the state.” *Appendix at p. 32A*. The majority incorrectly concludes, however, that holdings of this sort pose a “significant contradiction to the reasoning employed in *Lennane*.” *Id.* The majority was incorrect because “substance” and “scope” are two different things.

Indeed, the cases cited by the Court of Appeals, *Belle Isle Grill Corp v. Detroit*, 256 Mich App 463, 481; 666 NW2d 271 (2003) and *People v. Sell*, 310 Mich 305, 315; 17 NW2d 193 (1945) do not support the majority's contention that a conflict exists with *Lennane*. In both cases, the courts acknowledged that the authority to exert the police power was still contingent upon the matter being a legitimate municipal concern.

In *Belle Isle*, a restaurant owner sued the City of Detroit for breach of contract when the local police department issued an "operations order" preventing cars from "cruising" during warm weather on Belle Isle, thus impeding traffic. Upholding the order, the Court of Appeals simply acknowledged that cities have the same types of police power as the State when enacting laws *pertaining to their municipal concerns* ("Under the provisions of *Const* 1963 and the Home Rule City Act, municipalities have been granted the authority to enact laws *pertaining to municipal concerns* including those involving 'the public peace and health and for the safety of persons and property.'") (Emphasis added, citations omitted). *Id.* at 480-481. Similarly in *Sell*, as pointed out in Judge Sawyer's dissenting opinion, *Appendix at p. 40A*, the Supreme Court also determined that the ordinance was a municipal concern ("Ordinances and statutes of similar import to the ordinance involved in the present case ... have been held constitutional as a valid exercise of *municipal police power*.") (Emphasis added). *Id.* at 319-320. Moreover, *Sell*, which involved an ordinance imposing criminal sanctions for selling commodities under ration by the federal government during World War II, is not to be looked to for any general legal principles because, as the Supreme Court said within its decision, "[t]his ordinance should not be judged by the same tests as those applied to an ordinance enacted in peace time." *Id.* at 319. See also,

Judge Sawyer's dissenting opinion. *Appendix at p. 40A*, Fn. 1.¹²

The fact of the matter is that the provision in the 1963 Constitution calling for liberal construction of municipal authority does not grant any new substantive rights to municipalities beyond those in existence under the 1908 Constitution. The difference between the 1908 and 1963 constitutional provisions is that the latter merely broadened the interpretive lens through which the courts analyze the scope of municipal powers. Still, the fact that Michigan courts today broadly interpret laws in favor of municipal power does not change the fact that the underlying power must exist within the confines of constitutional delegation in the first place. Again, municipalities may only pass regulations relating to their municipal concerns. The relevant provision of the Michigan Constitution reads:

Under general laws the electors of each city and village shall have power and authority to frame, adopt and amend its charter and to amend an existing charter of the city or village heretofore granted or enacted by the legislature for the government of the city or village. Each such city and village shall have power to adopt resolutions and ordinances *relating to its municipal concerns*, property and government, subject to the constitution and law. No enumeration of powers granted to cities and villages in this constitution shall limit or restrict the general grant of authority conferred by this section.

¹² There is additional error in the majority's analysis. The majority puts great emphasis on completely irrelevant cases. The majority cites four cases – *Brimmer v. Village of Elk Rapids*, 365 Mich 6, 12-13; 112 NW2d 222 (1961), *Gildersleeve v. Lamont*, 331 Mich 8, 12; 49 NW2d 36 (1951), *Kane v. Flint*, 342 Mich 74, 77-78; 69 NW2d 156 (1955) and *Olson v. Highland Park*, 312 Mich 688, 695; 20 NW2d 773 (1945) – as “buttressing” its opinion that *Lennane* is not applicable to prevailing wage ordinance cases. *Appendix at pp. 32A – 34A*,. Yet each of those cases involved a city's municipal power to regulate wages or benefits of the *city's own workers*! The case ABC has brought involves a city's authority to regulate employment terms and conditions of *outside third parties*, i.e., wage and benefit rates paid by contractors to their employees on city funded projects. Thus, the cases cited by the majority (e.g., cities maintain a municipal concern over the wages of their own employees) are entirely different from the *Lennane* case and/or the case brought before it by ABC and the City of Lansing (cities do *not* have a municipal concern over the wages of third parties). The cases cited by the majority therefore add nothing to the analysis of the issues of the present case.

Const 1963, Art 7, § 22 (Emphasis added).

Because the current Michigan Constitution retains the mandate that municipal regulations must exist within a “municipal concern,” and because our current 1963 Constitution does not broaden the definition of “municipal concern” to include regulation of third party wage rates, it cannot reasonably be concluded that adoption of the 1963 Michigan Constitution somehow overruled *Lennane*.

While the Legislature certainly has the power to overturn prior court interpretation of its statutes, it is only where a statute (in this case, the Constitution) is passed or amended with sufficient clarity on a particular issue that it is to be accepted by the courts as overruling prior precedent on the issue. The starting point in this analysis is that both the framers of the Constitution and our Supreme Court have articulated that decisions of the Supreme Court not repugnant to or in direct conflict with the 1963 Constitution remain in force. Article III of the 1963 Constitution states this explicitly.¹³ So too, this Court has recognized that legal concepts developed through common law, including judicial interpretation of the Constitution and legislative acts (*i.e.*, “interstitial common law”¹⁴) are carried over to the interpretation of the same subject matter in a subsequent statute or new constitution. *People v. Reeves*, 448 Mich. 1, 8; 528 NW2d 160 (1995) and *Nation v. WDE Electric Co.*, 454 Mich. 489, 494-495; 563 NW2d 233 (1997). Against that backdrop, the Court has affirmed that legislative changes to the operation of common law, including interstitial common law, must be *clearly articulated* in the

¹³ Article III, Section 7, reads: “The common law and the statute laws now in force, not repugnant to this constitution, shall remain in force until they expire by their own limitations, or are changed, amended or repealed.”

¹⁴ Interstitial common law includes judicial interpretation of the Constitution, of legislative statutes, and of agency regulations, and the law application of law to specific facts. Garner, Bryan A., *A Dictionary of Modern Legal Usage* (2nd, revised ed.) (2001). New York: Oxford University Press.

examined legislation to be effective.

For example, in *Nummer v. Dep't of Treasury*, 448 Mich 534; 533 NW2d 250 (1995) where the Court of Appeals had held the Civil Service Commission's rejection of an employment discrimination claim did not preclude the plaintiff from re-litigating the issue in circuit court, the Supreme Court determined the Legislature had not provided sufficient clarity in the Michigan Elliot-Larsen Civil Rights Act to abrogate the common law application of issue/claim preclusion to the plaintiff's discrimination suit. The Court first juxtaposed the case against a prior issue/claim preclusion case, *Storey v. Meijer, Inc.*, 431 Mich. 368, 376; 429 NW2d 169 (1988), involving an unemployment agency rejection of a discrimination case. In that prior case, the Supreme Court *did* find clear language in the legislative act sufficient to overturn interstitial common law precedent concerning preclusion, holding that "Section 11(b)(1) clearly and unambiguously prohibits the use of MESC information and determinations in subsequent civil proceedings unless the MESC is a party or complainant in the action." Turning to the civil rights act in the case before it, the Court found differently however. It held at 544-546:

Preclusion doctrines are judicial creations, developed and extended from the common law. Accordingly, the Legislature is free to modify its strict application in any given statutory scheme. 2 *Davis & Pierce*, Administrative Law (3d ed), § 13.3, p 256. However, the Civil Rights Act is devoid of any statement that traditional preclusion rules do not apply to this statutory scheme. Hence, the difficulty lies in determining whether an intent can be inferred from the statutory scheme. *Davis & Pierce, supra*. In doing so, it must be remembered that the Legislature is deemed to legislate with an understanding of common-law adjudicatory principles. *Garwols v Bankers Trust Co*, 251 Mich 420, 424-425; 232 NW 239 (1930); *Astoria Federal S & L Ass'n v Solimino*, 501 US 104, 107-108; 111 S Ct 2166; 115 L Ed 2d 96 (1991).

Reviewing the Civil Rights Act, there is nothing remotely similar to the provisions found dispositive of legislative intent in either *Storey* or *Solimino*. Section 606 merely provides: "An appeal before the circuit court shall be reviewed de novo." Clearly, the express intent presented by the provision in

Storey is far from the instant provision providing that an appeal from the Civil Rights Commission "shall be reviewed de novo." The latter says nothing about use in later proceedings. The plain language simply contemplates an appeal from the Civil Rights Commission, but does not, by any stretch of the imagination, contemplate a new, original action in circuit court.

Just as there was not sufficient clarity in the civil rights statute in *Nummer* to overturn application of judicial precedent, there is nothing stated in the Article 7, Section 2, of the 1963 Constitution to overturn this Court's determination in *Lennane* that regulating the wages and benefits of third party contractors constitutes a municipal concern. Neither the Defendant/Appellee nor the majority of the Court of Appeals has identified language in the Constitution sufficient to clearly indicate a legislative overruling of *Lennane*.

Not only is there no evidence that adoption of the 1963 Constitution changed the meaning of what does and does not constitute "municipal concern," but the *Lennane* Court effectively analyzed the regulatory wage rate ordinance before it under the same kind of "liberal construction" as exists under the current Constitutional language. It assumed for purposes of that case that municipalities were delegated greatly enlarged police powers. The Court stated:

[i]f we assume, *as we have for the purposes of the case*, without deciding the question, that the city possesses such of the police power of the State as may be necessary to permit it to legislate upon matters of municipal concern, it does not follow that it possesses all the police power of the sovereign so as to enable it to legislate generally in fixing a public policy in matters of State concern."

Lennane at 641 (emphasis added). Yet even in premising its decision through liberal construction of the HRCA in favor of municipal power, the Court could not find that municipalities possessed the power to regulate third party wage levels. To the contrary, the Supreme Court ruled that such regulations do not fall within the gambit of municipal concerns. Because the *Lennane* court analyzed the matter of municipal regulation of third party wage levels the same way that Michigan courts should today, *Lennane* cannot logically or reasonably be said

to have been overruled by adoption of the 1963 Michigan Constitution.

It would be simply wrong to conclude that a change to liberal reading of municipal power as instructed by the 1963 Constitution justifies a finding similar to that of the majority panel – that “the reasoning employed in *Lennane* has been rejected.” *Appendix p 34A*. There is no act of the Legislature and no ruling by this Supreme Court in any other case expressing that conclusion or even permitting such an action. Thus, it stands to reason that the 1963 change in the interpretive focus of what specific powers municipalities may possess going forward is not sufficient to render this Court’s *Lennane* decision unjustified under current law. Since the Court’s decision in *Lennane* was correct under the HRCA at the time, since the effects of that decision are perfectly workable within our state today, since overruling that decision would cause palpable harm to contractors and other persons and businesses working in various localities, and since there has not been any change to the HRCA whatsoever or any identifiably substantive change in the Constitution concerning this Court’s decision, this Honorable Court should refrain from overruling the longstanding precedent of *Lennane*.

- C. **The Michigan Supreme Court should not overrule its precedent in *Lennane* because the Legislature – that branch of government best suited to determine public policy – has seen fit *not* to legislatively overrule the decision, thereby indicating its acceptance of *Lennane*’s precepts.**

The Michigan Supreme Court “believes that policy decisions are properly left for the people’s elected representatives in the legislature, not the judiciary. The legislature, unlike the judiciary, is institutionally equipped to assess the numerous trade-offs associated with a particular policy choice.” *Devillers v. Auto Club Ins. Ass’n*, 473 Mich. 562, 588-89; 702 NW2d 539 (2005). Whether or not a municipality *should* currently have the power to enact a living wage ordinance, prevailing wage ordinance, paid leave law, or any other employment related

regulation of private third parties doing business in their jurisdiction, is clearly a question of public policy to be left to the legislature.¹⁵

This Court's decision in *Lennane* has been within sight of the Michigan Legislature since 1923. "It is a well-established rule of statutory construction that the Legislature is presumed to be aware of judicial interpretations of existing law." *Ford Motor Co. v. City of Woodhaven*, 475 Mich 425, 439-440; 716 NW2d 247 (2006). This presumed awareness, coupled with over 90 years of opportunity to amend the HRCA at any time to provide authority to municipalities to regulate third party employment terms, must all weigh very heavily in favor of a finding that the Legislature has always believed the Supreme Court's decision in *Lennane* was correct under both the 1908 and 1963 Constitutions. Indeed, had the Legislature believed the *Lennane* ruling was contrary to the intent of the drafters of the 1963 Constitution or the HRCA, it could have easily amended the HRCA to provide for specific "legislative overruling" of the decision at any time in the past 50 years. It has never done so. Because the Legislature has refrained from amending the provision at issue, Michigan courts should view that "silence or acquiescence [as] an indication that the Legislature agreed with the accuracy of [the *Lennane* Court's] interpretation" of the HRCA. *Wikman v. Novi*, 413 Mich 617, 638; 322 NW2d 103 (1982), citing *Magreta v. Ambassador Steel Co.* (on rehearing), 380 Mich 513; 158 NW2d 473 (1968); *In Re Clayton*

¹⁵ What is a public purpose is a matter for the legislative branch, and only where a plain case is made showing a departure from the law should the courts intervene. *Stottlemeyer v. General Motors*, 399 Mich. 605; 250 NW2d 486 (1977).

Estate, 343 Mich 101; 72 NW2d 1 (1955).¹⁶

Of course, this is not to say the Legislature has forgotten the HRCA. To the contrary, the Legislature has amended various provisions of the HRCA since *Lennane* was decided to specifically provide additional municipal powers it thought cities may not have possessed.¹⁷ More than that, and instructive to the point that the Legislature is presumed to have acquiesced to the *Lennane* holding, *the Legislature actually overruled the specific holding of a case cited within Lennane!* In *Clements v. McCabe*, 210 Mich 207; 177 NW 72 (1920), cited and discussed by *Lennane, supra*, at 639-640, the Supreme Court ruled that municipalities were not delegated the authority under the Michigan Constitution or the HRCA to zone city land for residential use only. *Clements*. at 216. Apparently in disagreement with that decision, the Legislature subsequently enacted the City and Village Zoning Act (subsequently repealed and replaced with the current Michigan Zoning Enabling Act, MCL 125.3101, *et. seq.*) providing municipalities the authority to zone property. Had the Legislature thought *Lennane* reached the wrong conclusion and that the Michigan Constitution, as effectuated by the HRCA, did indeed delegate to cities the authority to regulate wages and benefits contractors pay their employees on city projects, it could

¹⁶ As previously pointed out, the Supreme Court's ruling in *Boyd* also demonstrates that, absent legislative action to overturn court precedent, lawmakers are presumed to have adopted court precedent interpreting a statute, particularly a statute which has been amended since the interpretation. Citing *Consumers Power Co, supra* at 251, the Supreme Court in *Boyd* stated at 548: "... the doctrine of *stare decisis* applies with full force to decisions construing statutes or ordinances, especially where the Legislature acquiesces in the Court's construction through the continued use of or failure to change the language of a construed statute" and that "the principles of *stare decisis* are particularly applicable when the Legislature has reenacted the statute language without change." Again, the HRCA has been amended numerous times since 1923 when *Lennane* was decided.

¹⁷ See, as just one of many examples, 1978, Act 499, Imd. Eff. Dec. 11, 1978. This amendment added Section 117.4k to the HRCA and provided the authority for cities to appropriate funds for support of private, non-profit institutions related to artistic and cultural activities within their jurisdictions.

have done precisely what it did in *Clements* – it could have provided a legislative fix. Again, it did not do so.

As previously stated, the HRCA has *not* been amended in a manner which might possibly lead to the conclusion that *Lennane* has been legislatively overruled. The HRCA states in relevant part:

For the exercise of all municipal powers in the management and control of municipal property and in the administration of the municipal government, whether such powers be expressly enumerated or not; for any act to advance the interests of the city, the good government and prosperity of the municipality and its inhabitants and through its regularly constituted authority to pass all laws and ordinances *relating to its municipal concerns* subject to the constitution and general laws of this state.

MCL § 117.4(j)(3) (Emphasis added). This language is verbatim to that which existed when the Court determined *Lennane* in 1923. See, *Lennane* at 638. It is, therefore, as Judge Sawyer wrote in his dissent:

... what is lacking is any provision in the constitution or statute that expressly grants a city the authority to enact the type of ordinance at issue here that represents a change in law after the ruling in *Lennane*. That is, there is no particular reason to believe that the people in enacting the 1963 Constitution had any disagreement with the holding in *Lennane*. Nor has the Legislature seen fit to amend the Home Rule City Act, *MCL* 117.1 *et seq.* to explicitly grant the authority which *Lennane* concluded that cities lack.

Appendix at p. 39A.

This Court decided in 1923 that municipalities do not have the authority under the HRCA to set the wages and benefits of private parties because those public policy concerns were state concerns – not municipal concerns. Since our Legislature is deemed to understand the reach and implications of the Court’s decision in *Lennane*, and since it has not seen fit to amend the HRCA in regard to sharing these public policy concerns over the past 90 years (50 of which have occurred since the Constitution was changed), this Court should refrain from overruling its

longstanding precedent and leave the regulatory authority in the State. To do otherwise would be to create a public policy of shared regulatory authority between the state and municipalities, effectively imposing a policy choice on the Legislature – something the Court has repeatedly indicated it is reluctant to do.

CONCLUSION

The two judge majority on this panel of the Court of Appeals claims it technically did not overrule *Lennane* but, instead, simply found it “inapplicable” to this case. Yet the result of its wrongly reasoned decision is precisely that – the case is effectively overruled. *Lennane* concerned whether the City of Detroit was authorized under the Michigan Constitution, as effectuated by the HRCA, to maintain a prevailing wage ordinance requiring contractors to adjust their employment compensation terms to city prescribed levels when working on city projects. The present case concerns whether the City of Lansing is authorized under the Michigan Constitution, as effectuated by the HRCA, to maintain a prevailing wage ordinance requiring contractors to adjust their employment compensation terms to city prescribed levels when working on city projects. The facts and issues are exactly the same! Yet the majority of this panel of the Court of Appeals concluded that *Lennane* is somehow inapplicable to this case. That conclusion is obviously nonsensical.

Clearly, the majority of the Court of Appeals panel has decided this case differently from that of *Lennane* because it believes *Lennane* is no longer viable under the majority’s view of the current legal landscape. But that is not within the lower court’s power to decide. The only lawful ways to change what the majority considers to be a stubborn judicial fact is for the Legislature to amend the HRCA to specifically provide the municipal power to regulate third party wage rates or for the Supreme Court to overrule its own precedent. Because neither has

occurred since the time *Lennane* was decided and since the only change in circumstances between then and now relates merely to the focal lens by which the delegation of authority to cities is interpreted, the Court of Appeals was duty bound by the doctrine of vertical *stare decisis* to follow *Lennane* in this case. As articulated above, the Michigan Court of Appeals in *Rudolph* recently analyzed the dispositive issue in *Lennane* and applied the Supreme Court's ruling as ***binding precedent*** to virtually identical facts and circumstances in the case before. The Court of Appeals was correct to do so then and the Ingham County Circuit Court was correct to follow *Rudolph's* persuasive application of *Lennane* to Lansing's similarly designed PWO. The decision of two justices of the Court of Appeals to break ranks and discard *Lennane* in violation of the principles of *stare decisis* should not be allowed to stand.

While the HRCA has certainly been liberally interpreted since *Lennane* to provide for more municipal power, there are no cases, constitutional provisions, or Michigan statutes which provide municipalities with the power to regulate wage and benefit rates of private third parties. This is true even when *Lennane* was decided in 1923, and it is equally true today. The Legislature could have (and still can) change the rule with a simple amendment to the HRCA – something it has done in regard to other would-be municipal powers over and over again since the HRCA was passed in 1909. Since the Legislature has not acted, this Court should refrain from usurping the Legislature's role as maker of public policy and keep the *Lennane* decision operative in Michigan until such time, if ever, the Legislature decides to take action in regard to its precepts.

RELIEF REQUESTED

Because the Michigan Supreme Court has ruled that municipal concerns of municipalities do not include the regulation of third party wage and benefit rates, the unenforceability of the

Lansing's *ultra vires* PWO should have been affirmed. It was not. As such, it works injustice to ABC members and serves as an affront to this Honorable Supreme Court's standing as the supreme judicial body in the state of Michigan.

WHEREFORE, Plaintiff/Appellant ABC respectfully requests that this Honorable Supreme Court find the conclusions of law of the Court of Appeals to be legally erroneous, and remand the case back to the Court of Appeals for a ruling consistent with the Supreme Court's holding in *Lennane*.

Dated this 3rd day of February, 2014.

MASUD LABOR LAW GROUP

By: 
for Kraig M. Schutter (P45339)
Attorneys for the Plaintiff-Appellee
4449 Fashion Square Boulevard, Suite 1
Saginaw, MI 48603
(989) 792-4499
kschutter@masudlaborlaw.com

EXHIBIT A

Sign In

Sign Up

 Lansing

▀ Code of Ordinances

▀ Code Of Ordinances

▀ Part 2. Administration Code

▀ Title 2. General Provisions

▀ Chapter 206. Purchasing, Contracts And Sales

§ 206.99. Penalty

Latest version.

Whoever fails to comply with Section 206.18(b) is guilty of a misdemeanor, and the sentence shall include the following:

- (a) Payment of all wages and fringe benefits, plus interest at two percent per month on those wages and fringe benefits due the employee;
- (b) Payment for the cost of collection by the City, which shall be calculated using the hourly wage and fringe benefit costs of the City employees involved in the enforcement and collection of the wages; and
- (c) Prohibition from bidding on or performing any work as a subcontractor or being awarded any contract involving the City for a period of three years from the date the person, firm, corporation or business entity is found guilty of noncompliance with Section 206.18(b).

(Ord. No. 855, 8-31-92)

EXHIBIT B



The Federal Davis-Bacon Act: The Prevailing Mismeasure of Wages

Sarah Glassman, MSEP
Michael Head, MSEP
David G. Tuerck, PhD
Paul Bachman, MSIE

Beacon Hill Institute at Suffolk University

8 Ashburton Place, Boston, MA 02108

Web: www.beaconhill.org email: bhi@beaconhill.org

phone: 617-573-8750 fax: 617-994-4279

February, 2008

Table of Contents

Executive Summary	3
Introduction.....	8
Part 1: Prevailing Wage Method of Determination	13
Planning and Scheduling the Surveys.....	13
Conducting the Surveys	15
Population Surveyed	16
Survey Format.....	16
Survey Response Rates	17
Clarifying and Analyzing the Respondents' Wage Data	18
Determining the Prevailing Wage.....	18
Issuing the Wage Determinations	19
Evidence of Davis-Bacon Act Prevailing Wage Inaccuracies	20
Alternatives to Davis-Bacon Prevailing Wages.....	22
The BLS Method.....	23
Improvements in Accuracy	25
Part 2: A Comparison of BLS and DBA Wages.....	26
Comparison of Descriptive Statistics.....	26
Means Tests	31
Cost to Federally Funded Construction	32
Part 3: Prevailing Wages in the States	33
Conclusion	38
Appendix.....	39
Methodology	39
Paired Means Test.....	45
Weighted the Wages	48
Cost to Federally Funded Construction	49
MSA Wage Data	51

Table of Tables and Figures

Table 1: Threshold Amounts for State Prevailing Wage Laws	9
Table 2: Comparison of Hourly Wage Descriptive Statistics.....	26
Table 3: Metropolitan Areas with Differences between DBA and BLS Wages.....	29
Table 4: Selected State and Federal Prevailing Wages Compared to BLS Wages.....	35
Table 5: BLS vs. Davis-Bacon Job Descriptions.....	40
Table 6: Adjustments made while Constructing DBA Dataset	41
Table 7: Paired Means Test (one-tail).....	46
Table 8: Variance Test	47
Table 9: Means Test.....	47
Table 10: Cost of Construction Projects Covered by the DBA (in millions of dollars) ..	50
Table 11: Hypothetical Costs by MSA (in millions of dollars)	51
Table 12: Davis-Bacon Prevailing Wages by Metro Area.....	51
Table 13: BLS Average Wages by Metro Areas	54

The authors would like to thank Allison Kelly-Hawke, Alfonso Sanchez-Penalver, Jonathan Haughton, Colleen Sprague, Ian Finn and Frank Conte for their assistance.

Executive Summary

In the United States, federal, state and local governments spend about \$300 billion annually on construction projects. Because of their cost and visibility, public construction projects are often the object of criticism from politicians and pundits, a notable example being Boston's "Big Dig," known for its cost overruns and embarrassing, even deadly, structural failures.

The Prevailing Wage Law

One feature of public construction projects that the critics seem less willing to recognize, however, is that they function also as a costly welfare system for union workers. This feature stems from the federal Davis-Bacon Act, under which construction projects funded entirely or in part by the federal government must pay a government determined "prevailing wage" to the workers on the project. While the Davis-Bacon Act (DBA) gets periodic attention from Congress and various critics, there is a general unawareness of the arcane and generally unrepresentative statistical calculations that underlie its enforcement. The purpose of this study is to unearth the methods behind these calculations, to identify some of the anomalies they produce and to estimate what they cost taxpayers.

Prevailing wage laws permeate the federal and state statutes relating to construction. The federal government, 32 states and the District of Columbia require the payment of a prevailing wage for all workers employed directly on site for government-funded construction projects. The DBA, which was adopted by Congress in 1931 and subsequently much modified, provides the legislative authority for enforcement of the prevailing wage at the federal level and the basis for prevailing wages in the states.

Because prevailing wage laws establish a wage floor, they raise construction costs. The reason is twofold: First, the wage that "prevails" in a particular place at any snapshot in time might be greater than the wage that contractors would have to pay if, for example, they could hire cheaper labor from outside the area. Indeed, as we observe in our study, it is the very possibility that employers could hire cheaper labor that led to the passage of the DBA in the first place. Second, because the law is intended to reduce wage

competition, the government authorities responsible for calculating the prevailing wage are under pressure to use methods for calculating the wage that are biased upward.

DBA v. Impartial Methods of Calculating Wages

That pressure of this kind exists is evident in the fact that the federal government is compelled to employ two methods for computing wages. At the Department of Labor, The Wage and Hour Division (WHD) has the job of calculating the prevailing wage under the DBA.

The U.S. Bureau of Labor Statistics (BLS), also at the Department of Labor, has the parallel job, as its website proclaims, of computing “impartial, timely, and accurate data relevant to the needs of our users and to the social and economic conditions of our Nation, its workers, and their families.” The BLS describes itself as the “principal fact-finding agency for the Federal Government in the broad field of labor economics and statistics.”¹

The division of responsibility between computing wages for the purpose of DBA enforcement, on the one hand, and producing “impartial, timely and accurate data,” on the other, has predictable results. When we examined the WHD’s methodology, we found:

- untimely wage reporting due to the vast number of wages to be determined across the entire country and the limited resources available to the WHD,
- poor survey design, which places a heavy burden on survey participants and leads to lower participation from small and medium sized firms,
- strong incentives and the opportunity for unions to dominate the process of reporting wages, and
- ill-conceived calculation methods, including a “majority rule” method that lets as few as 12.5% of survey respondents set wages for the entire universe of workers.

¹ See Bureau of Labor Statistics (BLS), “About BLS) available at <http://www.bls.gov/bls/infohome.htm>; Internet; accessed February 1, 2007.

In contrast, the BLS uses the Occupational Employment Survey (OES), which collects wage data from over 1.2 million establishments. Thus BLS wage estimates rely on a much larger sample that better represents wages that actually prevail in the labor market.²

We find that the WHD mismeasure of wages has three principal consequences for construction wages and costs.

Finding Number 1: The WHD methods inflate wages, on average, by 22%. It comes as no surprise that the WHD methods produce estimates biased in favor of high-cost, union labor. We compared the estimates reported by the WHD to the estimates reported by BLS for a sample of nine occupational categories accounting for 59% of all construction workers across 80 metropolitan areas. We found that on average the DBA prevailing wage is almost \$4.43 per hour, or more than 22%, above the BLS average wage when wages are weighted according to the number of workers in each trade and each metropolitan area.

As a result, taxpayers pay a premium for work performed on public construction projects. In the Nassau-Suffolk, New York metropolitan area, brickmasons and blockmasons make at least \$24.17 per hour more than they would make if the prevailing wage were calculated using BLS methods. In Poughkeepsie-Middleton, New York, plumbers, pipefitters and steamfitters get a premium of \$26 per hour. Steel and metal workers in Bakersfield, California receive a premium of \$16.37.

Finding Number 2: The WHD methods inflate construction costs by 9.91%. Labor costs are about 50% of construction costs. On that basis, we estimate that the systematic biases in the statistical measures used to implement the DBA raise the cost of public construction projects subject to the federal prevailing wage by 9.91%. This is the nationwide average. The increase in cost is substantially higher in some metropolitan areas. For example, construction costs are 19.54% higher in the Nassau-Suffolk MSA and 25.15% higher in the Riverside-San Bernardino-Ontario MSA.

² We surveyed MSAs in four states to determine whether the methods used by state governments to calculate the prevailing wage were better than the methods used by WHD. We found that the states generally did no better than the WHD.

Finding Number 3: The WHD methods raise public construction costs by \$8.6 billion per year. Using data from the Congressional Budget Office, we estimate that 32% of total public construction spending is subject to the DBA. Total public construction spending was \$298 billion in 2007. Thus, about \$95 billion is currently spent on DBA projects. Given that the WHD procedures add 9.91% to construction costs, those procedures currently cost taxpayers \$8.6 billion in overpayments for public construction projects.

Why a Prevailing Wage Law?

The prevailing wage law has been hard to defend from the start. It has operated to protect special interests from competition and to penalize taxpayers and low-wage workers for the benefit of an entrenched monopoly. Moreover, the current method of determining the prevailing wage violates its statutory purpose – that projects funded by the federal government

shall contain a provision stating the minimum wages to be paid various classes of laborers and mechanics which shall be based upon the wages that will be determined by the Secretary of Labor *to be prevailing* for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the city, town, village, or other civil subdivision of the State in which the work is to be performed.³

Methods used by the WHD to calculate the prevailing wage produce estimates that are biased upward. The WHD calculates, not the prevailing wage, but the wage that would prevail if the wage-setting process were dictated by the construction unions. The simplest way to eliminate this bias would be to repeal the DBA. Then we would know what wage prevails simply by observing what contractors pay.

On the other hand, if it is the wish of voters and taxpayers that construction workers get the wage that prevails in the community, rather than the wage that workers might get if contractors brought in outside labor, then the government should make an accurate determination of the prevailing wage. It should not employ unrepresentative survey and

³ “Davis-Bacon Act, Public – No. 403-74th Congress S.3303”; Internet, available at <http://www.dol.gov/csa/regis/statutes/whd/dbra.htm> (italics added).

measurement methods, to the benefit of union workers but at a cost to taxpayers of \$8.6 billion annually.

Introduction

The Davis-Bacon Act of 1931 (DBA), named for sponsors Congressman James Bacon of New York and Senator James Davis of Pennsylvania, was enacted to help protect local workers during the Great Depression. In New York, Congressman Bacon saw local construction jobs go to low-cost laborers from the south and wanted to halt this competition to local labor. President Hoover saw the DBA as a method to counteract wage rates that were falling during the Great Depression. The timing was important in that DBA prevailing wages were applied to the vast number of public works construction projects undertaken during the New Deal.

Today the federal government, 32 states and the District of Columbia have prevailing wage laws that originate from the original DBA of 1931.

DBA requires payment of a minimum wage equal to the “prevailing wage,” as determined by the Department of Labor (DOL), for all workers employed directly on site for federally-funded construction projects exceeding \$2,000 in total value. The DBA defines a multitude of classes for laborers and mechanics to be taken into account when calculating the minimum payment required.

The DBA has been amended several times since it was first enacted. The first and most comprehensive amendment was passed in 1935 and provided additional specifications including the \$2,000 minimum contract size, remedies for noncompliance and Presidential authority to suspend the law in the event of a national emergency.⁴

In 1940, the DBA was amended to include the territories of Alaska and Hawaii. Employee benefits were added to the requirements in 1964. The DBA pay and benefit requirements have been added to approximately 60 statutes which apply to construction projects through grants, loans, loan guarantees and insurance. Legislation such as the Housing and Community Development Act of 1974 has served to expand the DBA provisions to U.S. territories and protectorates. These “related acts” involve construction projects in such areas as transportation, housing, air and water pollution reduction and

⁴ U.S. Department of Labor, Wage and Hour Division, “Davis-Bacon Act,” available at <http://www.dol.gov/csa/regs/statutes/whd/dbra.htm>; Internet: accessed February 6, 2008.

health. Today the federal government, 32 states and the District of Columbia have prevailing wage laws that originate from the original DBA of 1931.

Table 1 provides data on whether a state has a prevailing wage law or not, as well as information on the threshold project size, above which the prevailing wage, if any, applies.⁵ States with no prevailing wage laws ensure that they pay market wages for their state and locally funded public construction projects that are determined through competitive bidding. Those states that maintain high thresholds for project cost for the application of the prevailing wage laws avoid the costs and reporting burdens of prevailing wage laws for smaller projects. Those states that maintain low or no threshold for project size will encounter the full cost of prevailing wages for most or all of their public construction projects.

Table 1: Threshold Amounts for State Prevailing Wage Laws

State	Threshold Amount, \$
Alabama, Arizona, Colorado, Florida, Georgia, Idaho, Iowa, Kansas, Louisiana, Mississippi, New Hampshire, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Utah, and Virginia	No Prevailing Wage Law
Connecticut, Delaware*, Indiana, Kentucky, Maryland, Nevada, Vermont, Wisconsin**	100,000 to 500,000
Arkansas, Maine, Minnesota [†] , Montana, New Mexico, Ohio ^{††} , Oregon, Pennsylvania, Tennessee, Wyoming,	25,000 to 75,000
Alaska, California, Hawaii, New Jersey [‡] , Rhode Island,	1,000 to 2,000
Illinois, Massachusetts, Michigan, Missouri, Nebraska, New York, Texas, Washington ^{‡‡} , West Virginia ^{‡‡‡}	None
<p>*The threshold amount in Delaware begins at \$15,000 for remodeling. **State and Municipal contracts: \$21±6,000 where more than one trade is involved; \$44,000 where a single trade is involved, State highway contracts: none. [†]A \$2,500 threshold is applicable where a single trade is involved. ^{††}A \$20,955 threshold is applicable for remodeling. [‡]A \$10,743 threshold is applicable if the work is done for municipality. ^{‡‡}A \$25,000 threshold is applicable for State college/university construction, per a separate law. ^{‡‡‡}A \$50,000 threshold is applicable for projects of the West Virginia Infrastructure and Jobs Development Council.</p>	

Despite numerous amendments, the DBA does not prescribe a calculation method for determining prevailing wages; instead, the decision is left to the Secretary of Labor. In the absence of a detailed and documented method, numerous questions have arisen about the consistency of the wages across states, such as large variances between counties that share borders.

⁵ U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, "Dollar Threshold Amount for Contract Coverage;" available from <http://www.dol.gov/esa/programs/whd/state/dollar.htm>; Internet; accessed February 1, 2008.

In 1963, the Wage Appeals Board (now Administrative Review Board) was created to sort out these matters.⁶ The board is empowered to rule on questions of “fact and law” related to the decisions made by the WHD. The board rules on questions regarding the prevailing wage rates, overtime pay, job classification, damages and appeals. While the board provides a forum to air grievances, its rulings are often issued without justification or supporting documentation.

In the first five decades under DBA, union wages were the basis for determining the prevailing wage. The prevailing wage” was set to a common wage, often the union wage, for an area if 30% of the workers in a job classification were paid the same wage. Later, in 1982, the threshold was increased to 50%.⁷ However, if no single wage rate comprises a majority, the average wage is calculated from the data and becomes the prevailing wage rate.

However, many critics question whether the federal DBA and state-level determined prevailing wages capture the wages that prevail in their local labor markets. In November 1992, the Institute for Justice, a public interest law firm, filed a lawsuit against the DBA claiming it to be in violation of the Constitution. The suit claimed the Act was racially motivated by attempting to keep minority contractors out of the bidding process, and called for its repeal.⁸ The lawsuit failed and the DBA, with the controversies regarding its wage determinations unresolved, remains in force today.

In 1997 Congress recognized the controversies surrounding the DBA wage determinations and commissioned the Office of the Inspector General (OIG) to perform an audit on the 1995 wage determinations. The study did not find any evidence of fraud or intentional submissions of incorrect wages; however, the study did find a large number of inaccuracies in the data submitted by employers, leading to incorrect prevailing wage calculations.

⁶ U.S Department of Labor, “Davis-Bacon Wage Determination Reference Material”; available from <http://www.gpo.gov/davisbacon/referencemat.html#secA>; Internet; accessed February 6, 2008.

⁷ 29 C.F.R. 21.1.2(a) (July 1, 1989 ed.). This rule was challenged but was upheld in *Building and Construction Trades' Department. AFL-CIO v. Donovan*, 712 F.2d 611 (D.C. Cir. 1983).

⁸ Scott Bullock and John Frantz, “Removing Barriers to Opportunity: A Constitutional Challenge to The Davis-Bacon Act,” Institute for Justice; 1993; available from http://www.ij.org/economic_liberty/davis_bacon/backgrounder.html; Internet: accessed February 1, 2008.

The OIG audited 837 WD-10 forms (submitted by contractors for determining the prevailing wage). Of these, 123 forms were found to be incorrect, with a total of 211 “significant errors”.⁹ Of these errors, 117 resulted from incorrect data submitted by employers and 34 errors were attributed to the WHD. The final report also sighted methodological issues with the WHD prevailing wage calculation.¹⁰

Since very little information is available about the occupation determinations, there are many instances in which contractors become confused and pay incorrect wages. It is difficult for contractors to define a prevailing wage and when it should be used. There are four different wage definitions for each job category in each county of the United States. Depending on the DOL definitions, a worker could be defined as a carpenter for “Building,” “Heavy,” “Highway” or “Residential” projects.

We find that DBA wages are grossly inflated when compared to the BLS wages. Given a 2007 public construction budget of almost \$300 billion; costs are inflated by roughly \$8.6 billion due to inflated DBA wage determinations.

The DBA was initially enacted to prevent contractors from seeking cheaper labor from outside their local market, which would undercut local wages and employment in the construction industry. Today the implementation of the law is no longer consistent with the original intent of the law, which was to force contractors to pay the wage that actually *prevails* in a local labor market. The methods utilized to determine prevailing wages, by both federal and state governments, mandate wages that differ, often considerably, from the wages that actually prevail.

In contrast to the DBA method of calculating the prevailing wage, the DOL relies on far more accurate, and extensive, wage estimates to administer the Foreign Labor Certificate program. Wage rates for the program are determined using survey data from BLS.

This study analyzes the different methods utilized to determine wage estimates by the two branches of the DOL (the WHD and the BLS) and provides a comparison of the

⁹ Government Accounting Office, “Inaccurate Data Were Frequently Used in Wage Determinations Made Under the Davis-Bacon Act,” Report No. 04-97-013-04-420; March 10, 1997; available from http://www.oig.dol.gov/public/reports/oa/pre_1998/04-97-013-04-420s.htm; Internet; accessed February 1, 2008

¹⁰ Ibid.

prevailing wage data calculated under the DBA to the more robust BLS calculations. Because of the issues inherent in the WHD's method of determination as well as the strong pressure from unions, the DBA prevailing wages do not capture the wages that actually prevail in the market.

Part 1: Issues with the Method of Determination

Part 1 focuses on the WHD prevailing wage calculation method. We examine the four-step wage determination process, highlight weaknesses in this process and identify problems that could stem from these weaknesses.

Part 2: A Comparison of Prevailing Wage Estimates

Part 2 highlights differences that exist between the prevailing wage estimates under the WHD and by BLS. We construct a database that consists of the BLS and WHD wage estimates for a sample of 80 metropolitan areas and nine job categories. We calculate the descriptive statistics for the wages and make comparisons between each.

Part 3: Prevailing Wages in the States

In this section we assemble data for four Metropolitan Statistical Areas in different states that have laws concerning the calculation and enforcement of wage rates and the determination of projects requiring the payment of prevailing wages. We collected the state level prevailing wages for nine occupations and compared these to the federal DBA and the BLS wage calculations.

We find that DBA wages are grossly inflated when compared to the BLS wages. Given a 2007 public construction budget of almost \$300 billion, costs are inflated by roughly \$8.6 billion due to inaccurate DBA wage determinations.

Part 1: Prevailing Wage Method of Determination

The existing federal DBA wage determination process involves four steps: (1) planning and scheduling of surveys, (2) conducting the surveys, (3) clarifying and analyzing the respondents' data and (4) issuing the wage determinations. Problems that contribute to inaccurate prevailing wage estimates begin early in the process and continue throughout all four steps.¹¹

Planning and Scheduling the Surveys

Prior to calculating the prevailing wage rate, the WHD conducts voluntary surveys (WD-10 survey) of the wages and fringe benefits paid to workers in specified job classifications for comparable construction projects in specific geographical areas. Federal prevailing wages are estimated on a county basis (in some cases an estimate is determined for a group of counties), the geographic unit designated by the WHD. The WD-10 survey is sent to contractors from lists supplied by the agency's regional offices. The survey includes questions regarding the contractor, subcontractors, submitter, project, type of construction and hourly wage and fringe benefits being paid to specific classifications of worker.

Planning begins in the third quarter of each fiscal year when the WHD distributes the Regional Survey Planning Report (RSPR), supplied by the F.W. Dodge Division of McGraw-Hill Information Systems, to their regional offices. The RSPR is comprised of data that shows detailed information regarding active construction projects as well as data from federal agencies about upcoming construction projects. The data show the quantity and value of construction projects by geographical area, type of construction, the percentage of the project that is federally financed, the date of the most recent survey in a county and the current wage determination. Using the RSPR, regional offices, in collaboration with the national office, then determine the county and types of construction to be included in that year's survey.

¹¹ United States General Accounting Office, "Davis-Bacon Act Process Changes Could Address Vulnerability to Use of Inaccurate Data in Setting Prevailing Wage Rates," (June 1996): available from, <http://www.gao.gov/cgi-bin/getrpt?T-HEHS-96-166>; Internet; accessed February 1, 2008.

Due to the vast number of prevailing wages to be determined across the entire country (more than 3,000 counties, well over 100 job categories and four project classifications) and the limited resources faced by the WHD, it is not possible to survey each county each year. Therefore, the office must annually identify specific areas that are most in need of revision by referring back to the RSPR. According to the WHD general requirements, areas should be surveyed every three years. Areas in need of a survey are identified based upon the following criteria: (1) the volume of federally funded construction projects in the area, (2) the age of the last survey completed and (3) requests or complaints about the existing prevailing wage estimate.¹² Multiple problems arise as a result of this method and contribute to the inaccuracies in the prevailing wage estimates.

Under the WHD's general requirements, one county could be surveyed in one year and another in the same state three years later. This time gap allows many changes associated with job classifications, salary increases and cost of living adjustments to be unaccounted for in the prevailing wage estimates.

Salary increases occur within a three-year time span due to developments in technology as well as changing job responsibilities. Because there are areas that may not have been surveyed in three years, workers in that area may be receiving wages substantially below what workers in other counties are receiving per the DBA. Furthermore, some areas will consistently have more federally funded construction projects taking place than others, consequently bumping those areas further up on the priority list for a new survey.

In addition, DBA prevailing wage estimates that are not routinely recalculated miss cost of living adjustments due to inflation. Goods and services experience continuous price changes and prevailing wages that have not been updated, in some cases for more than three years, will not capture these increases.

While the DBA prevailing wage estimates in areas that have not been surveyed in years will be significantly below the true market wages, workers in areas that have just been

¹²United States General Accounting Office, "Davis-Bacon Act Process Changes Could Raise Confidence that Wage Rates are Based on Accurate Data"; (May 1996); available from <http://www.gao.gov/archive/1996/he96130.pdf>; Internet; accessed February 1, 2008.

surveyed will clearly be at an advantage. The prevailing wages in their area of employment will reflect recent changes in job categories and inflation.

As a result, workers performing the same construction job in different locations may receive completely different wages which are not a result of differing market wages. For example, workers employed to work on the construction of a federally funded roadway that needs work in multiple counties within the same state, may receive prevailing wages that reflect data from different years. The prevailing wage rate would depend on the location of the construction work being completed on the roadway.

The problems outlined above are exacerbated further if areas are not surveyed within the three-year requirement. In the process of compiling our database, we found numerous examples of job categories in counties in which the wage estimates had not been updated in well over three years.

The issue of the timeliness of the DBA wage data contributes to inaccuracies found within our sample (see Part 2). Specifically, several metropolitan areas, where we found the DBA wage estimates to be significantly below the BLS wages, resulted from noncompliance with the requirement to complete a survey every three years. As noted above, the current method used by the WHD to complete wage surveys is an enormous undertaking, and wage surveys are not completed every three years.

Conducting the Surveys

Once survey schedules are approved, regional offices begin to compile lists of potential survey participants. Analysts from Construction Resources Analysis (CRA) at the University of Tennessee provide regional offices with files of projects that are appropriate for the survey. CRA identifies projects by applying a model to the F.W. Dodge data that pinpoints projects within the parameters specified by the regional offices. The files include the location, type and cost of construction as well as contact information for the primary contractor and subcontractors, if available, that were active during the given time period specified. The time period can be three months or longer and is based on the number of projects that are active; the time period is expanded if there are not enough active projects for the survey.

Population Surveyed

The WD-10 survey form is sent to contractors and subcontractors along with a letter requesting information on any other applicable projects. Letters announcing the survey and a copy of the WD-10 form are also sent to members of Congress, contractor trade associations and building trade unions to inform them of the survey and solicit their information as well. Contractors who do not respond to the initial request are sent a second WD-10 form. Those who do not respond to the second inquiry are contacted by telephone.

Survey Format

The WD-10 survey form includes questions about the contractor, subcontractor, project, type of construction and hourly wage and fringe benefits paid to workers in specific classifications. The design of the survey places a heavy burden on survey participants, and hence can lead to a small and unrepresentative response rate. Survey recipients, particularly small firms, typically do not respond to the survey owing in large part to the time and effort necessary to complete the survey. The low response rate from small contractors contributes to inaccuracies in the wage data, as a smaller sample is less likely to provide reliable data. The DBA prevailing wage data is biased to the extent that it omits data on wages paid by small contractors.

WD-10 survey format problems concern the fringe benefit filing requirements. The survey requires employers to report hourly wages and hourly fringe benefits, yet fringe benefits are rarely quoted, reported or paid on an hourly basis. While firms typically calculate wage rates on an hourly basis, they have little need for, or experience in, calculating hourly fringe benefit rates unless they have previous experience with federally funded projects. Moreover, the survey requests employers to break out the hourly fringe benefits into different components, such as “pension,” “vacation and holiday,” etc., making the task even more burdensome.

Reporting fringe benefits as line items does not provide any additional information needed to determine the “per hour fringe benefit rate” that prevails in the market because employers do not consistently allocate the same amount of funds to each benefit. For

example one contractor may allocate 100% of their employees' benefit funds toward health insurance while another may opt to direct those funds towards life insurance.

Those employers that already record their employees wage rates in the format required by the survey are more likely to respond to the survey because their compliance burden is relatively low. However, employers who have not previously worked on federally funded projects (the very employers the survey is intended to capture) would likely choose not to complete the survey.

Survey Response Rates

As noted above, the design of the WD-10 survey produces a disincentive for firms, typically smaller or new to the process, to respond to the survey. Of the entities surveyed – union contractors, nonunion contractors, trade unions and trade associations – union contractors and trade unions have the strongest incentive to provide responses. Unions typically negotiate contracts that pay wages that are “above market wages” (otherwise unions would not exist). Once a contractor and the union agree on a wage, both have a powerful incentive to ensure that the DBA wage is not set below the union wage. However, if DBA prevailing wages are close to, or match, the union wages, firms using union labor can ensure that contractors paying lower wages will not underbid them on government funded construction projects.

With union contractors and unions dominating the survey responses, it is likely that the resulting estimates are strongly biased upward. As reported by the BLS, only 12% of all employed wage and salary workers are unionized, in the construction industry, only 13% are unionized. Union membership is less than 12% in 29 states and less than 5% in five. Union workers earn a median weekly income of \$833, compared to \$642 for nonunion workers.¹³ The practice of basing the prevailing wage on a small minority of workers who have, on average, weekly earnings that are almost 30% higher than other workers guarantees that the reported wage is anything but the prevailing wage.

¹³ U.S. Department of Labor, Bureau of Labor Statistics, “Union Members Summary”; available from <http://www.bls.gov/news.release/union2.nr0.htm>; Internet; accessed February 1, 2008.

Clarifying and Analyzing the Respondents' Wage Data

As completed surveys arrive at the WHD, analysts review them for missing information, ambiguities and inconsistencies. Analysts attempt to clarify any questions or problems through telephone conversations with the submitting contractor. Analysts then enter data from complete WD-10s into a computer which generates a WD-22a or Project Wage Summary for each project included in the data.

Determining the Prevailing Wage

The survey response rate is calculated prior to the survey cutoff date to determine if the sample of wage data collected is adequate. This allows survey analysts additional time to follow up if the response rate is low. The DOL considers the surveys an inadequate representation of the area if the survey response rate is less than 25%, or if less than half of the wage classifications are represented. If the survey response rate is determined to be inadequate, department analysts will take further steps to increase the robustness of the sample through follow up telephone calls encouraging contractors to submit their wage data. If, after a second attempt to increase the sample, the response rate is still insufficient, federal construction wage data will be included. If there is still a lack of data, analysts will combine private wage data from a nearby county to the current sample of wage data.¹⁴

The inclusion of existing federally funded projects in the survey population pushes up the calculated prevailing wage for new projects. However, because existing projects pay the mandated prevailing wage, their inclusion creates additional bias in the survey data. Moreover, if contractors are following the prevailing wage reporting rules, they will already have their wages and fringe benefits in a format that is compatible with the WD-10 survey. If an area, particularly a small area, is already undergoing a high level of federally funded construction projects, the survey responses from these projects could swamp the wages from other projects.

¹⁴ U.S. Department of Labor, "Davis-Bacon Wage Surveys"; available from <http://www.dol.gov/csa/programs/dbra/faqs/page38.htm>; Internet; accessed February 1, 2008.

Given the survey timeframe, the inclusion of federally-funded projects perpetuates outdated data. Moreover, if prevailing wage estimates from a previous year are already flawed, the flaws will be inherent in the new prevailing wage calculations.

Issuing the Wage Determinations

The designation of the federal prevailing wage depends on the data included in the survey responses. If, according to the survey data, a majority of workers in a single job category receive the same wage to the penny, that wage is designated as the prevailing wage. However, if no single wage rate comprises a majority among a job classification, the average wage is calculated from the data and becomes the prevailing wage rate.

The use of a majority wage as the prevailing wage could allow one or several large entities to determine the prevailing wage, especially in light of the potential low response threshold. A few large firms paying exactly the same wage for a specific job category could provide enough responses to meet the 25% threshold. The wage paid by these firms would be designated the prevailing wage if the wage comprised the majority of workers in the survey responses. Thus, as few as 12.5% (50% of 25%) of the contractors contacted to complete the survey could determine the prevailing wage to be paid by all contractors for federal projects.¹⁵

The following simplified example is provided to further illustrate the point. Suppose survey data indicated that only two contractors submitted wage data for a total of 7 electricians. One contractor reported an hourly wage of \$36.40 for four electricians and the other reported that his three electricians, all of whom earned different hourly wages, only made \$17.01, \$19.22 and \$20.32 an hour different wages. Based on the majority rule, the prevailing wage would be set to \$36.40, when, in fact the average market wage is closer to \$28.88 per hour. Let us suppose further that another 15 electricians are employed in the same area by another six firms that did not respond to the WD-10 survey and that each pay electricians exactly \$20.00 per hour. In this case we have satisfied the 25% response rate threshold, in that 25% of the contractors contacted submitted wage data for their workers ($2/8 = 25\%$). Under the majority rule, the four electricians paid

¹⁵General Accounting Office "Davis-Bacon Act, Labor Now Verifies Wage Data, But Verification Process Needs Improvement"; (January 1999); available from <http://www.gao.gov/archive/1999/he99021.pdf>; Internet; accessed February 1, 2008.

\$36.40 per hour represent the majority of the responses received ($4/7 = 57\%$). However, the \$36.40 wage does not represent the market wage of electricians in the area, and in this case, it represents the maximum wage paid. Furthermore, the prevailing wage in this case is based on only one of the contractor's responses out of the eight contacted ($1/8 = 12.5\%$).

Since the union wage is set through collective bargaining agreements between contractors and the unions, it is identical to the penny for a specific job across different employers. On the other hand, nonunion wages vary from contractor to contractor in the open market. As long as the current method, the majority rule, is used, the prevailing wage is likely to be set equal to the union wage. Individual contractors that complete WD-10 forms will typically have no influence over the wage determination because it is extremely difficult for the wages they pay nonunion workers to ever meet the 50% threshold.

The method employed by the WHD to calculate the prevailing wage results in calculations that do not reflect the wages that truly *prevail* in local labor markets. The method is biased upward by survey respondents who have an interest in influencing the prevailing wage. However, data sources and methods do exist that would allow for more timely and accurate DBA prevailing wage calculations.

Evidence of Davis-Bacon Act Prevailing Wage Inaccuracies

Due to questions raised in 1995 during federal construction projects in Oklahoma City, the U.S. Department of Justice conducted a criminal investigation of the DBA wage data collections. This situation led Congress to ask the OIG and the General Accounting Office (GAO) to perform periodic studies of the WHD and its procedures for determining the federal prevailing wage. These reviews include suggestions on improving the DBA survey and wage calculation methodology. The most recent study was completed by the OIG in March 2004 and contained many suggestions for improving upon on the quality of the DBA data and the WHD methods of calculation.

Since 1997 Congress has appropriated \$22 million in additional funding to modernize the DBA wage surveys. According to the OIG, the appropriation of these funds has produced limited improvements in the accuracy of the wage data. The OIG also has concluded that the data on which DBA calculations are based continue to be wildly

inaccurate. In 1997, Congress appropriated an additional \$3.75 million to modernize the DBA calculation process. The money was used to institute an independent verification procedure in an attempt to reduce the amount of inaccurate data supplied through the WD-10 survey forms. Unfortunately, this additional spending failed to increase the quality of the wage data. In the 2004 audit, the OIG found “significant inaccuracies in 65 percent of the comparisons of the WD-10 to actual payroll data” of survey respondents.¹⁶

In the period prior to the auditing change, 421 WD-10s were reviewed and errors were found in 406, an astonishing 96% error rate. Moreover, after the auditing change was implemented a subsequent review found, amazingly, that the number of accurate surveys had actually dropped: 257, or 98% of 261 surveys reviewed contained errors.

The OIG also concluded that the survey continues to produce biased data – the major complaint cited in the 1995 fraud case. OIG and GAO reports have criticized the WHD’s survey methodology as prone to bias because it relies only on contractors and third-party participants who wish to volunteer their information. The data is skewed by the fact that the most likely survey respondents are large companies that have the resources to employ additional staff to resolve clerical issues that the WD-10 survey form presents. Also, contractors who have no interest in pursuing government contracts would ignore the surveys. Conversely, unions have a strong incentive to ensure that the DBA wage equals their own wages so their bids would not be undercut on federal projects. The OIG found that the BLS wage surveys did not face these issues and would “provide a statistically valid means of establishing wage rates.”¹⁷

The OIG also found that the DBA wage determination process lacked timely execution. The OIG traced 236 surveys between December 31, 1994 and March 31, 2002 and found that the “data completion phase” was closed in approximately six months. However, they found large lags between the completion of the data collection process and the publication of the wages: Of the 236 surveys, 199, or 84%, took from one year and six months to six years and nine months to publish the wages.

¹⁶ Department of Labor, Office of Inspector General, “Concerns Persist with the Integrity of Davis-Bacon Act Prevailing Wage Determination,” Report Number: 04-04-003-04-420: (March 30, 2004); available from <http://www.oig.dol.gov/public/reports/oa/2004/04-04-003-04-420.pdf>; Internet; accessed February 6, 2008.

¹⁷ Ibid.

The OIG's most recent conclusion provides a quality assessment of the WHD methodology and enforcement. The report states:

Over 70 years after D-B's enactment, WH (Wage and Hour Division) still struggles with administering an effective prevailing wage determination program. WH has not sufficiently resolved findings and recommendations reported by OIG and GAO. The credibility of wage determinations remains questionable, because of concerns over data on which they are based. Delays in publishing wage decisions call their relevance into question... The time and expense associated with independent data verification by the firm could be eliminated if BLS did D-B surveys.¹⁸

The best method for determining prevailing wages comes from within the Department of Labor itself, from the Bureau of Labor Statistics.

The OIG calls for the BLS to provide the data for the determination of the federal prevailing wages. Next we examine the BLS methods.

Alternatives to Davis-Bacon Prevailing Wages

The entire process that relies on government bureaucrats to estimate the prevailing wage could be eliminated by one stroke by repealing Davis-Bacon. By relying on the market to determine the prevailing wage, we eliminate the need to measure it in the first place. Yet, many policymakers express concern over the effects of an outright repeal of the law suggesting that the prevailing wage laws help to preserve a skilled labor force in the construction industry, despite the fact that the construction industry gets along just fine using mainly nonunion labor. At any rate, the repeal of the DBA laws remains unlikely.

In the absence of an outright repeal of the DBA, significant reforms should be enacted to the wage calculation method that would align the "prevailing wage" to the wage that does, in fact, prevail. These include changes to the data collection methods (and thus the sample of wage data used to calculate the prevailing wage) as well as improvements to the wage calculation methods.

¹⁸ Ibid.

The best method for determining prevailing wages comes from within the Department of Labor itself: the Bureau of Labor Statistics. BLS collects payroll data from specific employers that meet preset criteria. The data is more timely and accurate.

The BLS Method

To calculate wage statistics the BLS relies on three surveys: the National Compensation Survey (NCS), The Occupational Employment Survey (OES) and the Current Population Survey. The Current Population Survey is conducted by the Census Bureau every month and provides data on the labor force, employment, unemployment and individuals not in the labor force.¹⁹

The National Compensation Survey (NCS) collects data on wages, compensation and benefits by combining data from the Occupational Compensation Survey (OCS), the Employment Cost Index (ECI), and the Employment Benefits Survey (EBS). The NCS surveys 154 metropolitan and non-metropolitan areas that best represent the nation. For its 2000 report, NCS surveyed 18,389 establishments, both private and public, accounting for nearly 89 million employees. A sample of establishments is selected from state insurance reports using probabilities proportional to employment size. Each establishment is classified and weighted according to industry and employment size so that the more employees a firm has, the greater the chance it will be selected for the survey.

The NCS uses field economists who visit each establishment and collect data through an interview process, asking questions about job duties, wages and benefits. The field economists also perform the last stage of the sampling process in which the respondent provides a comprehensive list of all employees and the specific functions of each employee at the establishment, a method called Probability Selection of Occupations (PSO).²⁰

The field economists also classify each employee under a job classification as defined by the 2000 Standard Occupation Classification (SOC) system which was established by the

¹⁹ U.S. Department of Labor, Bureau of Labor Statistics (BLS), "Current Population Survey"; available from <http://www.bls.gov/cps/home.htm>; Internet; accessed February 1, 2008.

²⁰ BLS, "National Compensation Survey, Occupational Wages in the United States, 2000"; available from <http://www.bls.gov/ncs/ocs/sp/ncbl0354.pdf>; Internet; accessed February 6, 2008.

Office of Management and Budget in 1999. In this system there are over 820 specific job categories, which are then grouped into 449 broad occupations, 96 minor groups and 23 major groups.²¹ After classifying the wages by job category, the wage data for each category is weighted according to the sample weight and the number of employees in the establishment. The data are also adjusted for numerous factors, including non-responding establishments and the occupation work schedule.²²

The OES uses a semi-annual mail survey to collect data and produce estimates of employment and wages for over 800 occupations of full and part-time employees in nonfarm establishments in the United States. The OES survey collects data on gross pay and excludes most benefits. The OES is funded by the BLS while the data collection is performed by State Workforce Agencies (SWA). The BLS releases all national and cross industry estimates and SWAs release all industry specific estimates at state levels.

OES reports are based on data collected from over 1.2 million establishments in the United States over a three year period. The OES chooses its sample from State Unemployment Insurance (UI) files. OES forms are sent to establishments with over 10 employees or up to 225 SOC occupations. Each three-year span is broken up into six month periods, with endpoints on the 12th day of May and November, with each period consisting of 200,000 SWA payroll surveys. This three year survey format ensures that no establishment is counted more than once in a three year period. For its May 2006 report, 78.1% of establishments responded to the survey, which represents 73.4% of the total sample employee population.²³

OES data are classified by job classification and industry. Like the NCS report, OES uses the SOC system to classify specific job categories. Establishments are classified by industry according to the North American Industry Classification System (NAICS), which classifies the data by numerous economic sectors, as well as state or local

²¹ BLS, "Standard Occupational Classification System"; available from <http://www.bls.gov/soc/>; Internet, accessed February 6, 2008.

²² BLS, "National Compensation Survey Methodology"; available at <http://www.bls.gov/ncs/methodology.htm>; Internet; accessed February 6, 2008.

²³ BLS, "Technical Notes for May 2006 OES Estimates"; (October 2007); available from http://www.bls.gov/oes/current/oes_tec.htm; Internet; accessed February 6, 2008.

government. The OES survey excludes workers that are “self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers,”²⁴

The twice annual survey over three years creates six panels of data. When a report is released, the old five panels of data are adjusted, using the Employment Cost Index, to reflect the most recent panel’s reference period. Data are also weighted “to represent all establishments that were part of the in-scope frame from which the panel was selected.”²⁵ For non-responding establishments, data from the closest responding establishments are used to calculate wage distributions and total employment in a region.

The WHD could realize substantial cost savings by utilizing the raw wage data collected by BLS, eliminating the need to conduct their own survey. Relying on the BLS wage data would solve numerous issues mentioned earlier in the report. It would address concerns relating to the timing of the surveys, to the population accounted for in the sample of wage data, to the geographic areas surveyed and to inconsistent job categories across counties.

Improvements in Accuracy

A change in the method of calculation used by the WHD would also lead to cost savings. As outlined above, the WHD currently uses a majority rule to determine prevailing wages resulting in prevailing wages that are likely to be set equal to union wages, which are typically the highest wages in the market. Prevailing wages would be more likely to resemble true market wages if the current majority-rule system was replaced with a new method that utilized representative samples.

Unlike majority rule, which only captures a portion of the populations’ wages, both the mean and median would take into account all wage data across the sample distribution. By eliminating the possibility that wage determinations will be strongly influenced by a small number of workers receiving exceptionally high wages, prevailing wages would be less biased.

²⁴ BLS, “Occupational Employment Statistics Survey,” available from <http://www.bls.gov/oes/home.htm>; Internet; accessed February 6, 2008.

²⁵ Bureau of Labor Statistics “Occupational Employment and Wage Technical Notes,” (May 2007) available from <http://www.bls.gov/news.release/ocwage.tn.htm>; Internet; accessed February 6, 2008.

Part 2: A Comparison of BLS and DBA Wages

The differences in wage calculation methods between the U.S. Department of Labor's Wage and Hours Division and the Bureau of Labor Statistics, as mentioned above, produces a wide variation in their results. In this section we compare the results of the wages reported by the two arms of the DOL for a sample of nine occupational categories across 80 metropolitan areas. We test whether the average DBA wages are statistically higher than the average BLS wages using two separate statistical tests; and estimate the effect of DBA prevailing wages on construction costs.

Comparison of Descriptive Statistics

Table 2 contains descriptive statistics of the BLS and WHD wage estimates for the nine occupations across the 80 metropolitan areas. The averages of the BLS wage estimates for each occupation are lower than the average of the wages reported by the WHD.

Table 2: Comparison of Hourly Wage Descriptive Statistics

Occupation	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
BLS Hourly Wages									
Mean	21.12	18.56	17.80	21.96	16.26	21.10	16.60	19.78	21.28
Median	20.59	18.22	16.97	21.64	16.11	20.92	16.31	19.55	20.63
STDEV	4.50	3.62	4.00	4.17	2.89	4.86	3.69	4.50	5.42
Davis-Bacon Hourly Prevailing Wages									
Mean	23.48	21.03	20.04	25.26	18.44	24.29	19.25	23.91	22.45
Median	24.46	22.32	20.32	26.51	17.78	26.32	20.00	26.08	23.25
STDEV	8.62	8.59	8.71	9.48	8.12	9.94	8.50	9.80	7.78
Difference (Davis-Bacon Wage - BLS)									
Mean difference									
\$	2.36	2.47	2.24	3.30	2.18	3.19	2.65	4.13	1.17
%	11	13	13	15	13	15	16	21	5
Median difference									
\$	3.87	4.11	3.35	4.87	1.67	5.40	3.70	6.53	2.62
%	19	23	20	23	10	26	23	33	13

On average, the DBA prevailing wage for the entire sample of occupations is \$2.63, or more than 13% above the average of the BLS wage estimates. We can see that the largest premiums (the difference in the two reported wage estimates) are for electricians, plumbers and sheet metal workers. DBA prevailing wages for sheet metal workers are on average \$4.13, (21%) higher than the average for the BLS estimates, whereas DBA electrician wages are on average \$3.30 (15%) higher than the BLS wages. The DBA wage estimates for plumbers, pipefitters and steamfitters are \$3.19 (15%) higher than the BLS wages. Consequently, costs associated with federally-funded construction projects, specifically those that contract electricians, plumbers and sheet metal workers (all very typical workers contracted for projects) will be inflated due to higher costs of labor.

WHD wages for structural iron and steel workers and painters are considerably closer to the BLS wage estimates. The average DBA wage for structural iron and steel workers and painters are \$1.17 (5%) and \$2.18 (13%) higher than the BLS wage calculations respectively.

The pattern remains fairly consistent when taking the difference in median wages for our sample of metropolitan areas. The DBA wages for sheet metal workers, plumbers, electricians and carpenters are over \$4.00 per hour (20%) higher than the BLS wages. The difference between the DBA and the BLS wages narrows significantly for painters and structural iron and sheet metal workers.

The descriptive statistics displayed in Table 2 do not tell the whole story of the differences between the DBA and BLS wages. While on average the DBA wage calculations are 13% higher than the BLS calculations, there are 16 metropolitan areas for which the BLS wage is substantially higher than the DBA wage for at least eight of the nine job categories. Moreover, 53 MSAs in our sample, or 66% of the total, contain at least one job category with a DBA hourly wage that is lower than the BLS wage calculation.

The top portion of Table 3 displays the metropolitan areas for which DBA wages are lower than BLS wages for the same job categories by the largest margin. The largest difference between DBA and BLS wages are in Sarasota, Florida, Wilmington, North Carolina and Asheville, North Carolina. The MSAs in this group appear to be

predominately located in the southeastern portion of the country, except for Grand Rapids, Michigan and Portland, Maine.

The bottom portion of Table 3 shows those MSAs in our database for which the DBA wages were higher, by the largest margin, than the BLS wages. Nassau, New York, Riverside, California, Edison, New Jersey, Santa Anna and Bakersfield, California show the largest dollar DBA wage premium, on average over \$10 per hour, over the BLS wages. These cities are geographically concentrated in California and the northeastern portion of the country.

Table 3: Metropolitan Areas with Differences between DBA and BLS Wages

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction & maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
DBA lower than BLS									
Sarasota-Bradenton-Venice, FL	-10.02	-8.87	-7.83	-9.49	-10.57	-9.46	-8.99	-6.7	na
Wilmington, NC	-4.12	-8.26	-7.26	-10.57	-7.71	-8.42	-7.38	-10.08	-8.53
Asheville, NC	-5.48	-7.11	-6.05	-7.91	-4.54	-9.01	-7.2	-5.56	-7.62
Grand Rapids-Wyoming, MI	-5.11	-3.25	-6.57	-7.81	-5.11	-2.76	-3.86	-10.87	-9.88
Lynchburg, VA	-5.65	-5.57	-3.66	-5.34	-4.54	-8.17	-4.95	-3.43	-8.49
Port St. Lucie-Fort Pierce, FL	-5.54	-6.16	-4.82	-5.62	-7.38	-3.27	-4.37	-3.47	-7.9
Birmingham-Hoover, AL	-1.67	-4.74	na	-9.46	-3.62	-7.38	-4.33	-2.16	-5.08
Tampa-St. Petersburg-Clearwater, FL	-4.8	-3.94	-3.4	-6.17	-4.41	-4.6	-4.42	-4.81	-5.73
Lakeland, FL	-5.15	-4.19	-2.39	-7.74	-4.56	-4.91	-2.64	-2.61	-7.99
Palm Bay-Melbourne-Titusville, FL	-5.25	-4.99	-2.81	-4.9	-4.86	-5.12	-2.83	-4.79	-2.92
Orlando-Kissimmee, FL	-5.45	-5.01	-5.58	-5.46	-4.04	-4.65	-4.13	-4.61	1.01
Roanoke, VA	-3.07	-3.43	-4.56	-4.75	-5.09	-4.79	-2.93	-6.29	-1.49
Jacksonville, FL	-4.28	-5.28	-2.7	2.75	-5.54	-4.62	-2.77	-2.26	-4.88
Richmond, VA	-2.12	-5.46	-3.09	2.2	-3.35	-4.73	-5.3	-4.19	-0.23
Jackson, MS	-0.02	-1.01	-4.04	-4.83	-4.42	-1.31	-3.11	-1.55	-0.38
Portland-S. Portland-Biddeford, ME	-4.48	-0.9	-3.48	4.17	-1.81	-1.7	-4.97	-1.53	-1.29
Average	-4.51	-4.89	-4.55	-5.06	-5.10	-5.31	-4.64	-4.68	-4.76
DBA Wage higher than BLS									
Nassau-Suffolk, NY	24.17	8.63	20.63	16.28	14.01	14.67	10.23	10.17	3.07
Riverside-San Bernardino-Ontario, CA	12.17	14.13	8.66	12.22	13.77	15.42	12.25	17.35	9.42
Edison, NJ	10.97	11.16	11.68	na	14.01	11.82	na	na	na
Santa Ana-Anaheim-Irvine, CA	18.34	12.26	6.16	13.85	9.41	9.21	11.97	13.41	8.37
Bakersfield, CA	9.34	14.42	12.93	7.39	8.73	6.79	13.26	16.37	3.07
Poughkeepsie--Middletown, NY	8.46	2.88	13.34	12.61	4.57	26.00	12.92	7.73	1.44
Modesto, CA	13.01	12.31	11.77	5.84	10.82	10.31	0.36	8.98	14.94
Bridgeport-Stamford-Norwalk, CT	2.61	2.90	na	12.51	9.29	8.33	13.63	17.24	na
Oakland-Fremont-Hayward, CA	7.67	7.07	2.50	9.06	11.42	16.34	9.08	20.00	0.53
San Francisco - Redwood City, CA	1.98	7.30	1.82	13.05	10.54	14.77	5.96	15.51	11.94
Stockton, CA	10.76	3.85	8.65	10.50	11.31	11.83	6.24	7.45	11.13
Camden, NJ	5.93	13.02	7.07	13.24	13.92	13.39	7.57	2.23	0.82
Salinas, CA	6.89	3.49	1.84	9.46	11.53	19.31	12.59	9.47	1.91
Average	9.68	8.38	9.14	11.07	10.72	13.17	10.40	11.61	6.03

This overview of the data shows that there are large differences between DBA and BLS wages. Since, in some of the metropolitan areas, the DBA wages are much higher than the BLS wages and for other MSAs the BLS wages are much higher than the DBA wages there should be systematic errors explaining these inconsistencies. These inaccuracies warrant a closer examination of the wage estimates for these metropolitan areas.

The DBA wage determinations for MSAs that were significantly below the BLS wages, as published online, have not been updated for several years, and in some cases decades. For example, the DBA wages for Wilmington, North Carolina show a publication date of February 9, 2007, but no modifications were made to the wages for the publication. Moreover, the webpage indicates that the wages were last modified December 1, 1980 or over 27 years ago. Had WHD employees not confirmed this fact the actual hourly wages listed on the page provides a good indicator of the timeliness of the data. For example, the DBA prevailing wage listed for a carpenter is \$6.02 per hour, while the wage for a painter is \$5.15, even below the recently increased federal minimum wage of \$5.85 per hour. The DBA wage determinations for Sarasota County, Florida also show a publication date of February 9, 2007; however, wages have not been modified since November 1, 1978 and contain wage levels similar to those for Wilmington.

Theoretically, contractors in these counties could bid for a federally-funded construction project and pay their employees at rates not much higher than the federal minimum wage.²⁶ However, any contractor contemplating this course of action would encounter a powerful deterrent: the market wage. Assuming that the BLS wage represents the market wage, contractors would be unable to find workers at the DBA wage and would thus be forced to pay the higher market wage. In this case, the DBA prevailing wage is moot and produces no distortions in the bidding for federally funded construction contracts.

We also examined the DBA wage data published for those counties for which the DBA wage exceeds the BLS wage by the largest margin, including the counties of Nassau, New York, Riverside, California, Edison New Jersey and Santa Anna, California. The dates for these areas also show a publication date of February 2, 2007, but the wage data

²⁶ Conversations with WHD employees confirmed this scenario over the phone.

shows that modifications were made within the last three years with no significant time lags. The combination of recent updates found in our data sample and the likelihood of errors in the reported wages discovered by the GAO reports produce DBA wages that are distorted and biased upward for these MSAs.

In these metropolitan areas the DBA wage distorts the labor market for federal contracts by forcing all bidders to pay wages that are biased upward toward the highest-wage producers. The DBA prevailing wage, in effect, insulates these producers from competition by forcing other producers to pay equally high wages. As a result, federally-funded projects suffer high construction costs.

As indicated in Part 1 of this study, one of the reasons for not making a prevailing wage determination would be that the WD-10 survey response rate failed to achieve the 25% threshold. However, according to the WHD, it is also possible that these counties were not included in recent surveys, despite the rule that they must be surveyed every three years. Regardless of the reason, the DBA wage determination should be left blank or indicated that no wage determination has been made for the most recent period. It is an absurd practice for the WHD to publish wage data that purports to be the “prevailing wage” and is in reality data that is almost 30 years old, as is the case in Sarasota County, Florida.

Means Tests

In order to make a statistical inference about the differences between BLS and DBA wage estimates for the entire United States we needed to test if the differences between the means of the two are statistically different. We conduct two different means tests; a one-tailed paired means test and a two-tailed means test assuming unequal variances.

Our paired means test is based on the assumption that the BLS and the WHD perform independent calculations of wage estimates; however each takes a random sample from the same population (MSA). Therefore, a strong argument can be made that the results are dependent on each other and the difference between their results should be equal to zero. Based on the results (see Table 7 in the Appendix) we are able to conclude that,

with 95% confidence, DBA wages for all nine occupations are statistically higher than the wages calculated by the BLS.

Our second means test is based on the assumption that the WHD does not calculate DBA prevailing wages using a random sample, but is biased towards union members and larger companies. Consequently, the wage estimates reported by the BLS and WHD are not based on similar samples of the same population and the wage calculations are independent of each other. The test results (see Table 9 in the Appendix) show that for all occupations other than “Structural Iron and Steel Workers” there is a statistically significant difference between the means of the two samples.

Cost to Federally-Funded Construction

Both tests completed above show that DBA prevailing wages are on average statistically higher than the wages reported by the BLS. Therefore, we are able to conclude that DBA prevailing wages drive up overall federal spending on construction (through inflating labor costs) and consequently place a heavy burden on taxpayers.

In order to estimate how much DBA prevailing wages are driving up federal construction costs, we calculated a weighted average wage of the 80 MSAs across the nine occupation groups using employment in each occupation (from the BLS) as the weight (see the Appendix).²⁷ We found the weighted average wage for BLS to be \$20.13 per hour, and \$24.56 per hour for DBA, or DBA wages are 22% higher than BLS.

According to the Congressional Budget Office, in 2001 \$67 billion in government spending was allocated to projects covered by the DBA, accounting for approximately 32% of the total public construction spending in that year.²⁸ Applying this percentage to the public constructions costs for 2007, results in about \$95 billion applied to projects with DBA prevailing wages. Applying BHI calculations (see the Appendix) this costs

²⁷ BLS database at <http://data.bls.gov/oes/search.jsp>.

²⁸ “Budget Options”. The Congress of the United States Congressional Budget Office. Feb 2001, Internet, Available at <http://www.cbo.gov/ftpdocs/27xx/doc2731/ENTIRE-REPORT.PDF>

taxpayers \$8.6 billion per year.²⁹ In all, the DBA wage determinations add 9.91% onto each applicable construction project.

While an almost 10% increase in total cost is a significant amount, taxpayers in some of the MSAs reviewed faced even larger costs. In the Nassau-Suffolk, New York MSA the weighted DBA wage was \$39.50 per hour while the BLS weighted wage was only \$26.59 per hour, increasing costs for any project by 19.54%. For example, suppose that the federal Government funded a \$20 million project in this MSA. As a result of the inflated DBA wages, taxpayers would pay \$3.27 million for the construction than at market wages. In the Riverside-San Bernardino-Ontario, California MSA the results are even more shocking, with the same hypothetical project leading to \$4.02 million being overpaid, or an appalling 25.15% increase in total costs (see Table 11 in the appendix).

Part 3: Prevailing Wages in the States

Individual states have the option of adopting the federal prevailing wage or they can (1) authorize their own state officials to determine a state prevailing wage using their own method of calculation (2) adopt collectively bargained wages or (3) utilize the DBA methods.

States that opt to use the DBA prevailing wage, the DBA methodology or the local union wages are likely to experience higher public construction costs. Moreover, the threshold used by states to determine the application of state prevailing wages will either mitigate or amplify these costs. The threshold contract coverage under state prevailing wage laws differ significantly from state to state. Some states, such as California, require state prevailing wages to apply to almost all construction projects funded by the government, with the minimum threshold set at \$1,000. In contrast, state prevailing wage laws only apply to costly construction projects in states such as Maryland, where the minimum threshold is set to \$500,000.³⁰ As a result, states with a higher threshold will apply the inflated prevailing wages to fewer projects, while states with thresholds set low, such as

²⁹ "Value of Public Construction Put in Place", U.S Census Internet, Available at <http://www.census.gov/const/C30/pubsa2001.pdf>

³⁰ U.S. Department of Labor, WHD, "Dollar Threshold Amount for Contract Coverage Under State Prevailing Wage Laws, January 1, 2008"; available from <http://www.dol.gov/esa/programs/whd/state/dollar.htm>; Internet; accessed February 6, 2008.

California; will incur high costs by applying the inflated prevailing wages to almost all projects.

While the Davis-Bacon Act sets the prevailing wage for federal projects and utilizes its own survey method, a large number of individual states have implemented their own prevailing laws that apply to state construction projects. States employ several methods to calculate their prevailing wages: they conduct surveys, use the federal prevailing wage, set the prevailing wage to union wages or use a combination of the three.

BHI collected data on four MSAs in different states with state prevailing wage laws that delineate the calculation method, deployment of wage rates, and the projects that require prevailing wages. We collected the state prevailing wages for nine occupations and compared these to the DBA and the BLS wage calculations. Table 4 contains the results.

The New Jersey prevailing wage law applies to any public construction project defined as work on any public building, or if a public body leases or owns 55% or more than 20,000 square feet of the building. The public entity contracting for a project must submit a request to the New Jersey Department of Labor's Public Contracts Section (PCS) to receive the official prevailing wage rates. The PCS supplies wages that are "the wage and fringe benefit rates based on collective bargaining agreements established for a particular craft or trade on the locality in which the public work is performed."³¹ Thus New Jersey sets the state prevailing wage to the local union wage.

³¹ See website for State of New Jersey: Department of Labor and Workforce Development; available from http://lwd.dol.state.nj.us/labor/wagehour/wagerate/prevailing_wage_determinations.html; Internet; accessed February 6, 2008.

Table 4: Selected State and Federal Prevailing Wages Compared to BLS Wages

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
Camden, NJ									
DB	33.87	35.72	31.78	41.23	32.75	40.06	28.00	28.76	33.39
BLS	27.94	22.7	24.71	27.99	18.83	26.67	20.43	26.53	32.57
State	33.87	37.27	33.87	42.74	33.50	39.57	28.00	37.10	33.91
DBA - State	0.00	-1.55	-2.09	-1.51	-0.75	0.49	0.00	-8.34	-0.52
BLS - State	-5.93	-14.57	-9.16	-14.75	-14.67	-12.90	-7.57	-10.57	-1.34
Los Angeles-Long Beach, CA									
DB	33.78	33.61	28.00	35.47	N/A	30.97	29.00	27.14	N/A
BLS	21.66	22.93	20.20	25.38	18.25	20.71	20.46	21.77	25.7
State	34.07	35.51	28.00	34.25	28.47	30.88	29.90	33.37	30.51
DBA - State	-0.29	-1.90	0.00	1.22	N/A	0.09	-0.90	-6.23	N/A
BLS - State	-12.41	-12.58	-7.80	-8.87	-10.22	-10.17	-9.44	-11.60	-4.81
Milwaukee-Racine-Waukesha, WI									
DB	31.60	28.41	27.82	30.08	25.79	33.65	18.01	33.00	28.96
BLS	25.99	21.97	20.07	24.44	17.20	29.43	18.22	25.04	25.14
State	27.47	27.83	24.61	28.73	16.67	32.05	25.90	22.36	28.09
DBA - State	4.13	0.58	3.21	1.35	9.12	1.60	-7.89	10.64	0.87
BLS - State	-1.48	-5.86	-4.54	-4.29	0.53	-2.62	-7.68	2.68	-2.95
Pittsburgh, PA									
DB	25.38	26.37	23.29	29.92	23.74	29.38	24.39	28.97	29.13
BLS	21.95	18.53	21.23	24.18	21.54	25.96	16.41	23.29	25.65
State	26.93	26.36	23.29	30.38	23.43	31.35	24.39	28.14	29.13
DBA - State	-\$1.55	\$0.01	\$0.00	-\$0.46	\$0.31	-\$1.97	\$0.00	\$0.83	\$0.00
BLS - State	-\$4.98	-\$7.83	-\$2.06	-\$6.20	-\$1.89	-\$5.39	-\$7.98	-\$4.85	-\$3.48

The difference between the state and DBA prevailing wages in the Camden, New Jersey MSA for eight job categories is small, between 0% and 10%. The sheet metal worker job category contains a large difference, over \$8.00 per hour, between the state and federal prevailing wages. However, both the state and federal prevailing wage calculations are consistently higher than the BLS wages. State prevailing wages in New Jersey use union wages to determine the state prevailing wages, and since the state and federal prevailing wages are similar, the bias toward unions wages inherent in the DBA wage calculation become clear.

The Director of the California Department of Industrial Relations (DIR) determines prevailing wages for all state public construction projects over \$1,000, unless the awarding government body has a labor compliance program in place. If a labor compliance program is in place, then the threshold is \$25,000 for new construction and \$15,000 for repair/demolition work. The department uses a survey to determine the prevailing wages and applies majority rule. If the responses fail to meet the majority threshold, then the department applies a model to determine the prevailing wage.³²

The state prevailing wages for the Los Angeles, California MSA produce a similar pattern to that of Camden, New Jersey. See Table 4. The difference between the state and DBA prevailing wages is small, however both are significantly higher than the BLS wages. Like Camden, the state prevailing wage for sheet metal workers is significantly higher than the DBA prevailing wage. The overall results reflect the similar methods employed by the California DIR and DBA, such as the majority rule.

The state prevailing wage in Wisconsin is set by the Construction Wage Standards section of the Labor Department. The department determines wages by county, and also makes projections of next year's wages. These wages are set solely on the basis of an annual survey, for example in 2007 for the three counties in the Milwaukee MSA, 2,666 different companies received surveys. If only one trade is required to complete a project, the threshold for application of the prevailing wage is \$44,000, while if multiple trades are required the threshold is \$216,000.³³

The Milwaukee, Wisconsin MSA, consisting of three counties, contains the highest deviation from the DBA of our four MSAs. For all job categories, except roofers, the state prevailing wage is lower than the DBA prevailing wages and for brick masons, painters and sheet metal workers the state prevailing wage is closer to the BLS wage than the DBA wage. The state prevailing wage surveys in Wisconsin contain fewer distortions than the DBA prevailing wages.

³² See State of California, Department of Industrial Relations; available from <http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm>; Internet; accessed February 6, 2008.

³³ See State of Wisconsin; Department of Workforce Development; available from <http://dwd.wisconsin.gov/er/prevailing%5Fwage%5Frate/>; Internet; accessed February 6, 2008.

The Secretary of Labor and Industry for Pennsylvania sets the state prevailing wages and may consider the following guidelines when selecting the prevailing wage for Pennsylvania: federal prevailing wages, number of workers currently in the county for each occupation and current collective bargaining agreements. This information is obtained through voluntary wage submissions from interested parties. If the secretary decides that the information is incomplete, the department may conduct a field survey to gather a more robust sampling. Individualized wages must be requested for each individual construction contract in excess of \$25,000.³⁴

One would expect the prevailing wages for the Pittsburgh, Pennsylvania MSA to suffer from the same distortions as the federal prevailing wages, since the state uses the federal wage calculation to set their own. The data in Table 4 shows that the state prevailing wages match, almost identically, the DBA prevailing wages.³⁵ As one would also expect the wages are biased upward when compared to the BLS wages. The state inherits the same costly bias that the DBA prevailing wages produces.

The states that have their own prevailing wage laws can learn lessons from the experience of the federal government in the wage determining process. Piggybacking on the federal prevailing wage or copying their methodology will only import the mistakes and bias inherent in that system. Utilizing collective bargaining wage rates will likely result in a prevailing wage that is set above the wages that prevail in the local labor markets. States should, like the WHD, look to the BLS data and methods as a template for determining their prevailing wage rates.

³⁴ State of Pennsylvania; Department of Labor & Industry; available from <http://www.dli.state.pa.us/landi/cwp/view.asp?a=197&q=67245&landiRNavrad1B235=>; Internet;

³⁵ Pittsburgh's state numbers are based upon wages for Pittsburgh High School for Creative and Performing Arts determined on 07-05-2007

Conclusion

We find the BLS methodology to be much stronger and timely leading to more accurate wage measurements than under the WHD methodology.

The WHD calculates, not the prevailing wage, but the wage that would prevail if the wage-setting process were dictated by the construction unions. The simplest way to eliminate this bias would be to repeal the DBA. Then we would know what wage prevails simply by observing what contractors pay.

Since its creation in 1931, the Davis-Bacon Act has required the Department of Labor to calculate and enforce a “prevailing wage” for workers employed on federally funded construction projects. We find that the WHD employs unrepresentative survey and measurement methods that produce wages estimates that are biased upward. Moreover, the burden of calculating prevailing wages is beyond the ability of the WHD, despite recent increases in resources. The methods used by the WHD to calculate the prevailing wage produce estimates that are biased upward, resulting in a 9.91% overpayment on all federally funded construction projects, costing taxpayers \$8.6 billion annually. The BLS, another branch of DOL, also routinely calculates wages for hundreds of occupations. We find the BLS methodology to be much stronger and timely leading to more accurate wage measurements than under the WHD methodology.

The ideal solution would be to repeal the DBA. However, if it is the wish of voters and taxpayers that construction workers get the wage that prevails in the community, rather than the wage that workers might get if contractors brought in outside labor, then the government should make an accurate determination of the prevailing wage. To this end, the WHD should utilize the BLS survey data to determine the prevailing wages.

Appendix

Methodology

The Beacon Hill Institute (BHI) compiled a dataset of the Davis-Bacon Wage Determinations as published by the US Government Printing Office (GPO) in 80 Metropolitan Statistical Areas (MSAs) for nine job categories.³⁶ The Bureau of Labor Statistics produces wage data for separate job classifications by MSA, but the WHD publishes the DBA prevailing wages at the county level. In order to compare the two data sets, we used the DBA prevailing wage county data to construct MSA level data.

Our initial data set consisted of all MSAs, as defined by the U.S Census Bureau. We excluded MSAs that bisected more than one state to eliminate state differences, such as labor laws, as a factor within the MSA. Many MSAs comprise only one country which allows for a straight comparison between the BLS and the WHD wage data without need for further adjustments.

For MSAs encompassing several counties we used a weighted average of the wages in the included counties.³⁷ We used U.S. Census Bureau data for county population as our weight and calculated the ratio of the county population to the total MS population, and multiplied the result by the DBA wage for that county. This process was repeated for the wages of all counties in an MSA and the results were summed, creating a weighted average of the wages for each job category within an MSA.

There were numerous discrepancies between BLS and DBA definitions of job categories. In order to compare the wages of BLS and DBA job categories, we made several adjustments. In the case where DBA data contained more job categories than the BLS data, we calculated a simple average of the wages for the different Davis-Bacon job categories to create one category comparable to that of BLS, as defined on the BLS Occupational Employment and Wage website for individual job categories.³⁸

³⁶ Government Printing Office, "Davis-Bacon Wage Determinations"; available from <http://www.gpo.gov/davisbacon/index.html>; Internet; accessed 8 November 2007.

³⁷ Bureau of Labor Statistics, "Metropolitan Statistical Areas and Components"; available from <http://www.bls.gov/sac/790metdf.htm>; Internet accessed 8 November 2007.

³⁸ Bureau of Labor Statistics, "Occupational Employment and Wages, May 2006," available from <http://www.bls.gov/oes/current/oes470000.htm>; Internet; accessed 8 November 2007.

Table 5 lists the BLS job descriptions and the corresponding DBA job description(s). For instance, for some counties DBA defines separate wages for both Plumbers and Pipe Fitters. In this case, we calculated a simple average of the two wages. If DBA specified a wage for only one of the applicable job categories, that wage was used.

Table 5: BLS vs. Davis-Bacon Job Descriptions

BLS Job Description	Davis-Bacon Job Description(s)
Brickmasons and Blockmasons	Bricklayer
Carpenter	Carpenter
Cement Masons and Concrete Finishers	Cement Mason, Concrete Finisher
Electrician	Electrician
Painters, Construction and Maintenance	Painter, Painter (Brush), Painter (Spray)
Plumbers, Pipe Fitters, and Steam Fitters	Plumber, Pipefitter
Roofer	Roofer
Sheet Metal Worker	Sheet Metal Worker
Structural Iron and Steel Workers	Ironworker (Structural)

DBA wage determinations are sometimes classified by specific job duties of one particular category. For example, DBA may publish wage determinations for a general carpenter category, as well as specific categories for carpenters that work as pile drivers and floor layers. We used the general carpenter wage determinations as the best match to the BLS carpenter job category definition.

DBA wage determinations are frequently missing for job categories or counties within an MSA. BHI compensated for a missing DBA wage for a county in a given MSA by replacing the missing wages with those of the most populous county with available wage data in the MSA. If only one county was available, that wage would be used as the wage for the MSA. Table 6 lists the adjustments made to individual counties and job codes to construct our dataset.

Table 6: Adjustments made while Constructing DBA Dataset

MSA	Job Description	Issue
Appleton, WI	Cement masons and concrete finishers	Missing all counties in MSA
	Structural iron and steel workers	Missing all counties in MSA
Baltimore-Towson, MD	Painters, construction and maintenance	Missing Ann Arundel County replaced with Baltimore County, largest county in the MSA
	Structural iron and steel workers	Missing Queen Anne's County, replaced with Baltimore County, largest county in the MSA
Bethesda-Gaithersburg-Frederick, MD Metropolitan Division	Cement masons and concrete finishers	Missing Montgomery County, replaced with Frederick County, largest county in the MSA
Billings, MT	Cement masons and concrete finishers	Missing Carbon County, replaced with Yellowstone County, largest county in the MSA
	Painters, construction and maintenance	Missing Carbon County, replaced with Yellowstone County, largest county in the MSA
	Sheet metal workers	Missing Carbon County, replaced with Yellowstone County, largest county in the MSA
	Structural iron and steel workers	Missing all counties in MSA
Birmingham-Hoover, AL	Cement masons and concrete finishers	Missing all counties in MSA
	Painters, construction and maintenance	Missing four counties making up 34% of MSA population, replaced with Jefferson County, largest county in the MSA
	Plumbers, pipefitters, and steamfitters	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
	Roofers	Jefferson County, largest county in the MSA, was the only county with Roofing wages
Bridgeport-Stamford-Norwalk, CT	Cement masons and concrete finishers	Missing wage in the only county making up this MSA
	Structural iron and steel workers	Missing wage in the only county making up this MSA
Boise City-Nampa, ID	Brickmasons and blockmasons	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
	Carpenters	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
	Painters, construction and maintenance	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
	Roofers	Missing all counties in MSA
	Sheet metal workers	Missing all counties in MSA
	Structural iron and steel workers	Missing Owyhee County, replaced with Ada County, largest county in the MSA

Cedar Rapids, IA	Structural iron and steel workers	Missing Benton County, replaced with Lynn County, largest county in the MSA
Charleston, WV	Painters, construction and maintenance	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
Charleston-North Charleston, SC	Brickmasons and blockmasons	Missing all counties in MSA
	Roofers	Only have largest county, making up 55% of the population, this wage was used
	Structural iron and steel workers	Only have largest county, making up 55% of the population, this wage was used
Cleveland-Elyria-Mentor, OH	Cement masons and concrete finishers	Missing Geauga County, replaced with Cuyahoga County, largest county in the MSA
	Painters, construction and maintenance	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
Colorado Springs, CO	Cement masons and concrete finishers	Missing Teller County, replaced with El Paso County, largest county in the MSA
Des Moines-West Des Moines, IA	Structural iron and steel workers	Missing Guthrie County, replaced with Polk County, largest county in the MSA
El Paso, TX	Roofers	Missing wage in the only county making up this MSA
Grand Rapids-Wyoming, MI	Cement masons and concrete finishers	Missing Barry County, replaced with Kent County, largest county in the MSA
	Painters, construction and maintenance	Missing Newaygo County, replaced with Kent County, largest county in the MSA
	Sheet metal workers	Missing Newaygo County, replaced with Kent County, largest county in the MSA
	Structural iron and steel workers	Missing Iona County, replaced with Kent County, largest county in the MSA
Harrisonburg, VA	Plumbers, pipefitters, and steamfitters	Missing all counties in MSA
Jackson, MS	Brickmasons and blockmasons	Missing Rankin County, replaced with Hinds County, largest county in the MSA
	Roofers	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
Jacksonville, FL	Cement masons and concrete finishers	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
	Plumbers, pipefitters, and steamfitters	Missing Duval County, largest county in the MSA, replaced with Clay County, second largest county in the MSA

	Sheet metal workers	Missing Baker County, replaced with Duval County, largest county in the MSA
	Structural iron and steel workers	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
Knoxville, TN	Brickmasons and blockmasons	Missing all counties in MSA
	Cement masons and concrete finishers	Missing all counties in MSA
Lexington-Fayette, KY	Cement masons and concrete finishers	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
	Painters, construction and maintenance	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
	Plumbers, pipefitters, and steamfitters	Missing Clark County, replaced with Fayette County, largest county in the MSA
	Sheet metal workers	Missing Jessamine County, replaced with Fayette County, largest county in the MSA
Lynchburg, VA	Brickmasons and blockmasons	Missing all counties except Appotomax, this wage was used
	Cement masons and concrete finishers	Missing Appotomax County, replaced with Bedford County, largest county in the MSA
	Painters, construction and maintenance	Missing Appotomax County, replaced with Bedford County, largest county in the MSA
	Plumbers, pipefitters, and steamfitters	Missing Appotomax County, replaced with Bedford County, largest county in the MSA
Montgomery, AL	Brickmasons and blockmasons	Missing all counties except Lowndes, this wage was used
	Roofers	Missing Lowndes County, replaced with Montgomery County, largest county in the MSA
	Structural iron and steel workers	Missing all counties except Lowndes, this wage was used
New Orleans-Metairie-Kenner, LA	Brickmasons and blockmasons	Missing all counties in MSA
Ogden-Clearfield, UT	Brickmasons and blockmasons	Missing all counties in MSA
	Carpenters	Missing Davis County, largest county in the MSA, replaced with Weber County, second largest county in the MSA
	Painters, construction and maintenance	Missing all counties in MSA
	Structural iron and steel workers	Missing all counties except Morgan, this wage was used
Orlando-Kissimmee, FL	Brickmasons and blockmasons	Missing Osceola County, replaced with Orange County, largest county in the MSA
	Structural iron and steel workers	Missing Lake County, replaced with Orange County, largest county in the MSA

Port St. Lucie-Fort Pierce, FL	Roofers	Missing Martin County, replaced with St. Lucie County, largest county in the MSA
	Structural iron and steel workers	Missing St. Lucie County, replaced with Martin County, second county in the MSA
Portland-South Portland-Biddeford, ME	Painters, construction and maintenance	Missing Cumberland County, largest county in the MSA, replaced with York County, second largest county in the MSA
Richmond, VA	Brickmasons and blockmasons	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
	Cement masons and concrete finishers	Missing seven counties, applied largest counties wage to the missing counties, then used the weighted average
	Painters, construction and maintenance	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
	Plumbers, pipefitters, and steamfitters	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
	Roofers	Missing six counties, applied largest counties wage to the missing counties, then used the weighted average
	Sheet metal workers	Missing three counties, applied largest counties wage to the missing counties, then used the weighted average
	Structural iron and steel workers	Missing ten counties, applied largest counties wage to the missing counties, then used the weighted average
Roanoke, VA	Cement masons and concrete finishers	Only have Franklin County, this wage was used
	Painters, construction and maintenance	Missing four counties, applied largest counties wage to the missing counties, then used the weighted average
	Structural iron and steel workers	Missing Franklin County, replaced with Roanoke City, largest section in the MSA
Sarasota-Bradenton-Venice, FL	Structural iron and steel workers	Missing all counties in MSA
Syracuse, NY metro area	Structural iron and steel workers	Missing Onondaga County, replaced with Oswego City, largest section in the MSA
Toledo, OH	Roofers	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average

	Sheet metal workers	Missing two counties, applied largest counties wage to the missing counties, then used the weighted average
Tucson, AZ	Roofers	Missing all counties in MSA
West Palm Beach-Boca Raton-Boynton Beach, FL Metropolitan Division	Cement masons and concrete finishers	Missing all counties in MSA

Paired Means Test

In order to test if the differences between the means (of the BLS and the WHD reported wages) are statistically different we performed a one tailed t -test: a paired two sample for mean. Since the sample of employee wages that each agency is surveying in a specific MSA should be random, the difference between their results should be equal to zero. The test is based on our assumption that DBA wages are inflated and will be higher than those reported by the BLS. We use the following hypothesis:

- Null hypothesis
 - H_0 : the mean of the difference between the paired samples is less than or equal to zero,
- Alternative hypothesis
 - H_1 : the means of the difference is greater than zero.

First, we confirmed that the t -Test is appropriate by verifying the samples are randomly distributed. Since all 18 samples (9 occupations using 2 methods) are large ($n > 70$) we use “central limit theorem” to determine that we can assume normal distribution in our samples. Central limit theorem states that “for large, simple random samples from a population that is not normally distributed, the sampling distribution of the mean will be approximately normal...As the sample size (n) is increased, the sampling distribution of the mean will more closely approach the normal distribution.”³⁹

As shown in Table 7, for each occupation we are able to reject the null hypothesis and conclude that with 95% confidence that the DBA mean wages are statistically higher than the BLS mean wages.

³⁹ Ronald M. Weiers, *Introduction to Business Statistics*, 5th Ed. (Belmont, CA: Thomson Brooks/Cole: 2005).

Table 7: Paired Means Test (one-tail)

	<i>Test Statistic</i>	<i>d.f.</i>	<i>P-Value</i>
Brickmasons and blockmasons	**3.084	75	0.0014
Carpenters	**3.688	79	0.0002
Cement masons and concrete finishers	**3.166	70	0.0011
Electricians	**4.474	78	0.0000
Painters, construction and maintenance	**3.141	77	0.0012
Plumbers, pipe fitters, and steamfitters	**3.556	74	0.0003
Roofers	**3.586	74	0.0003
Sheet metal workers	**5.423	77	0.0000
Structural iron and steel workers	**2.145	73	0.0177
** Significant at 5% or 95% confidence interval			

We conducted a second test assuming independent samples, based on the assumption that the DBA methodology uses sampling techniques that result in a nonrandomized sampling. Therefore, we conducted a two-tailed *t*-test using the following hypothesis:

- Null hypothesis
 - H_0 : the means of the two samples are equal,
- Alternative hypothesis
 - H_1 : the means of the two samples are not equal.

To determine if a *t*-test assuming equal or unequal variances should be used, we conducted an Analysis of Variance test with the following hypothesis:

- Null hypothesis
 - H_0 : the variance of the underlying populations are equal,
- Alternative hypothesis
 - H_1 : the variance of the underlying populations are not equal.

Based on the test statistics we calculated (see Table 8) we reject the null hypothesis for all occupations. This means there is a statistically significant difference between the variances in all nine occupations.

Table 8: Variance Test

	<i>Test Statistic</i>	<i>d.f. DB</i>	<i>d.f. BLS</i>	<i>P-Value</i>
Brickmasons and blockmasons	**3.6761	75	79	0.0000
Carpenters	**5.6232	79	79	0.0000
Cement masons and concrete finishers	**4.7447	70	79	0.0000
Electricians	**5.1633	78	79	0.0000
Painters, construction and maintenance	**7.9058	77	79	0.0000
Plumbers, pipe fitters, and steamfitters	**5.4422	75	78	0.0000
Roofers	**5.2977	74	79	0.0000
Sheet metal workers	**4.7411	77	79	0.0000
Structural iron and steel workers	**2.0575	73	79	0.0009

** Significant at 5% or 95% confidence interval

As a result, we could conduct the more robust option, *t*-test: two sampling assuming unequal variance. As shown in Table 9, we reject the null hypothesis for eight of the nine occupations. Therefore, for all occupations, except “Structural Iron and Steel Workers” there is a statistically significant difference between the means of the two samples. In all cases a 95% confidence interval was met (p value = 0.05). Therefore, we conclude that, on average, the DBA wage for these eight job categories is statistically higher than the BLS wage calculation

Table 9: Means Test

	<i>Test Statistic</i>	<i>d.f.</i>	<i>P-Value</i>
Brickmasons and blockmasons	**2.132	112	0.0352
Carpenters	**2.371	106	0.0195
Cement masons and concrete finishers	**1.987	96	0.0498
Electricians	**2.831	107	0.0055
Painters, construction and maintenance	**2.236	96	0.0277
Plumbers, pipe fitters, and steamfitters	**2.363	101	0.0200
Roofers	**2.496	100	0.0142
Sheet metal workers	**3.390	107	0.0010
Structural iron and steel workers	1.069	129	0.2868

** Significant at 5% or 95% confidence interval

Weighted the Wages

At the national level there are more than five million workers employed in non-supervisory or administrative occupations in the construction industry. The nine occupations that were used in our analysis account for more than three million workers or 59% of all construction workers. We calculated one weighted wage for BLS and one weighted wage for DBA to use in our comparisons. The reasoning behind this is that we do not want the wage of 50 brickmasons in New Haven, Connecticut to be weighted equally to the 3,020 brickmasons located in the Phoenix, Arizona MSA.

OES employment data from the BLS was used as for the weights.⁴⁰ The employment data supplies the number of employees in each MSA for each occupation. To combine all 80 MSAs across nine occupations required two steps. The first was to find a weighted wage for each occupation, across all the MSAs. The second step was to combine these nine weighted wages into one final weighted wage for each method, BLS and DBA.

First, to calculate the weighted wage by occupation, we calculate a wage for each of the nine occupations. For example, one weighted wage was found for all electricians by weighing each MSA wage by the number of electricians employed in that MSA in relation to the total number of electricians employed in all 80 MSAs. For instance, as there are almost three times as many brickmasons and blockmasons in Albuquerque, New Mexico as in Asheville, North Carolina, the wage in Albuquerque counts for approximately three times as much as the Asheville wage when calculating the weighted brickmason and blockmason hourly wage.

After calculating these nine wages, we combine the weighted occupational wages based on employment in each job occupation in relation to total employment in the nine occupations. Following on the electrician model, we summed up the amount of electricians across all 80 MSAs (200,400) compared to the total employment of all nine occupations (1,034,050) in all 80 MSAs. This was the weight ($=200400/1034050$ or 0.1938) applied to the weighted electrician hourly wage from above. Since there are about twice as many roofers as structural iron and steel workers employed in our 80

⁴⁰ BLS database available at <http://data.bls.gov/oes/search.jsp>

MSA, the total weighted hourly wage for roofers carries roughly twice the weight as the weighted hourly wage of structural iron and steel workers in our final weighted wage for both BLS and DBA.

In some cases, either the DBA did not supply a wage or the BLS was unable to supply employment figures, in which case that data point was left out of the calculation. For instance, the DBA wage was not supplied for roofers in Tucson, Arizona. Therefore, the DBA wage for roofers in Tucson, Arizona was not included in the BLS weighted average. The amount of sheet metal workers employed in Salinas, California was not supplied by the BLS survey, so neither the DBA nor BLS wages were taken into account in the final weighted wage per hour. Once the weighted wage by occupation is calculated we applied a weight based on total employment in each occupation to these nine weighted wage by occupation. This resulted in one weighted wage for BLS, \$20.13 per hour, and DBA, \$24.56 per hour, showing that the DBA wages are inflated by 22%.

Cost to Federally-Funded Construction

Using the following method, BHI estimated a dollar value that DBA increases construction costs.

- x = total cost of a project covered by DBA prevailing wages,
- labor costs comprise 50% of total construction costs, and thus
- labor costs = $0.5x$, and
- DBA inflates labor costs by 22%.

We use the above assumptions to compute the percentage that DBA wages increase total construction costs.⁴¹ First we deflate the wage component of total costs (50%) by the percentage that DBA inflates labor costs ($0.5/1.22 = 0.4098$) to obtain the percentage of total cost represented labor in the absence of DBA. Next we add the cost of materials

⁴¹ We make this assumption on the basis of conversations with construction contractors. We consider 50% to be a conservative estimate. McGraw-Hill publishes a Construction Cost Index and a Building Cost Index. Labor costs make up 80% of the CCI and 64% of the BCI. See "4Q Cost Report: Sub-Prime Ripple Effect," *McGraw-Hill Construction ENR*, December 17, 2007. Also see Kent Gardner and Rochelle Ruffer; "Prevailing Wage in New York State: The Impact on Project Cost and Competitiveness" (Albany, NY: Center for Governmental Research, 2008) 17.

under DBA (50%) to arrive at the total cost factor $(0.5 + 0.4098 = 0.9098)$. To calculate the cost of the DBA prevailing wage (inclusive of total costs) we need to subtract one from the observed cost divided by the BLS cost $\left[\left(\frac{x}{0.9098x}\right) - 1 = 0.991 = 9.91\%\right]$. The result is that DBA wages increase total construction costs by 9.91%.

To apply this calculation to a more concrete example, we take a hypothetical example of a \$2.44 billion project covered by DBA prevailing wage, of which \$1.22 billion represents both labor and material inputs. Since we have shown that the labor costs are inflated by 22%, the actual labor cost should be \$1 billion, resulting in a total project cost of \$2.22 billion under BLS wages. We divide the original total cost by the adjusted total cost and subtract one from this total. The result is the percentage that DBA wages inflate total construction costs $\left[(\$2.44 / \$2.22) - 1 = 9.91\%\right]$

According to the Congressional Budget Office “approximately \$67 billion in federal funds was authorized for construction projects covered by the Davis-Bacon Act” in 2001.⁴² This \$67 billion was approximately 32% of the \$209.3 billion total public construction spending in that year.⁴³ Using this ratio we can infer that out of the \$298 billion spent on public construction in 2007, \$95.35 billion was spent on DBA projects. Based on the calculation above we know that DBA adds 9.91% to construction costs, taxpayers are burdened by an unnecessary \$8.6 billion per year. Table 10 shows costs and possible savings in wages for both 2001 and 2007.

Table 10: Cost of Construction Projects Covered by the DBA (in millions of dollars)

year	Total DBA Cost	Labor Cost	Nominal Increase in Wages	Percentage Increase in Total Cost
2001	\$67,000.00	\$33,500.00	\$6,040.98	9.91%
2007	\$95,348.15	\$47,674.08	\$8,596.96	9.91%

⁴² U.S. Congressional Budget Office, “Budget Options,” (February 2001); available from <http://www.cbo.gov/ftpdocs/27xx/doc2731/ENTIRE-REPORT.PDF>; Internet: accessed February 1, 2008.

⁴³ U.S. Census, “Value of Public Construction Put in Place,” available from <http://www.census.gov/const/C30/pubsa2001.pdf>; Internet: accessed February 1, 2008.

Table 11: Hypothetical Costs by MSA (in millions of dollars)

	Total Cost	Labor Cost	Nominal Increase in Wages	Percent Increase
Nassau-Suffolk NY	\$20.00	\$10.00	\$3.27	19.54%
Riverside-San Bernardino- Ontario, CA	\$20.00	\$10.00	\$4.02	25.15%

MSA Wage Data**Table 12: Davis-Bacon Prevailing Wages by Metro Area**

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
Akron, OH	27.45	26.31	24.94	29.73	24.70	30.49	21.90	26.27	25.32
Albuquerque, NM	22.15	22.26	18.32	29.59	17.86	25.64	17.72	23.48	22.00
Anchorage, AK	32.18	31.93	31.42	33.97	29.38	33.00	32.12	37.69	30.79
Appleton, WI	27.98	26.11	na	26.84	20.32	28.66	18.01	26.58	na
Asheville, NC	7.77	6.66	5.27	8.36	8.00	8.06	5.60	7.21	6.66
Bakersfield, CA	32.71	34.94	28.00	32.03	26.35	26.58	25.35	33.26	30.51
Baltimore-Towson, MD	18.98	17.20	23.04	27.72	14.41	23.21	19.18	26.16	23.84
Bethesda-Gaithersburg-Frederick, MD	18.49	15.00	15.12	32.72	21.00	19.01	21.90	28.31	17.72
Billings, MT	23.03	18.29	17.71	24.75	15.00	26.05	13.50	22.24	na
Birmingham-Hoover, AL	17.56	10.74	na	9.87	9.46	10.27	8.59	12.95	13.97
Boise City-Nampa, ID	23.59	14.29	13.70	27.16	15.00	25.83	na	na	22.69
Bridgeport-Stamford-Norwalk, CT	30.50	26.65	na	35.45	28.37	33.57	32.50	36.58	na
Buffalo-Niagara Falls, NY	28.50	26.78	na	29.34	23.18	24.80	24.08	29.25	27.17
Camden, NJ	33.87	35.72	31.78	41.23	32.75	40.06	28.00	28.76	33.39
Cedar Rapids, IA	22.51	20.73	19.90	26.26	17.53	29.17	13.26	24.59	20.76
Charleston, WV	24.90	23.98	24.11	29.38	21.43	27.37	24.90	24.01	23.06
Charleston-North Charleston, SC	na	10.29	8.72	11.29	9.84	10.87	9.00	10.45	21.00
Cleveland-Elyria-Mentor, OH	27.99	27.30	27.57	32.08	24.18	30.28	24.98	29.85	27.40
Colorado Springs, CO	22.17	24.50	23.80	26.80	11.43	27.55	20.00	27.34	22.50
Dayton, OH	25.20	22.85	20.18	28.45	21.54	26.75	21.07	24.36	24.43
Denver-Aurora, CO	22.17	24.50	23.80	28.87	17.54	31.45	20.00	27.34	22.50
Des Moines-West Des Moines, IA	22.89	20.15	17.78	25.42	19.66	24.83	17.43	18.62	21.35
Edison, NJ	33.87	35.72	33.70	na	33.13	41.05	na	na	na
El Paso, TX	13.45	14.26	11.91	18.70	9.17	15.14	0.00	9.76	10.23
Erie, PA	24.35	25.02	12.96	23.90	19.52	27.54	22.01	29.24	25.03
Fort Wayne, IN	27.54	23.05	22.50	28.17	21.39	26.65	25.04	27.24	23.02
Grand Rapids-Wyoming, MI	15.04	14.40	11.71	14.94	11.96	19.82	10.29	12.00	13.20
Harrisburg-Carlisle, PA	25.35	21.76	23.60	26.50	21.27	28.73	28.00	27.85	24.92

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
Harrisonburg, VA	16.00	12.43	12.73	15.50	13.85	na	11.21	10.68	15.50
Hartford, CT	30.25	26.65	na	33.34	28.37	na	28.65	29.55	31.05
Honolulu, HI	33.15	34.95	33.10	36.75	28.70	33.10	30.10	35.97	30.00
Jackson, MS	15.67	12.74	10.79	13.08	10.06	14.07	10.76	11.81	13.04
Jacksonville, FL	12.64	10.62	11.34	20.19	7.94	12.35	10.12	17.18	12.95
Kennewick-Richland-Pasco, WA	24.56	25.68	24.68	31.90	15.34	35.69	21.93	27.21	28.22
Knoxville, TN	na	13.03	na	20.39	11.30	12.00	20.00	22.85	19.16
Lakeland, FL	12.50	10.18	10.39	10.76	8.96	11.97	9.49	11.00	9.81
Lancaster, PA	25.35	13.75	15.22	13.86	11.78	15.77	10.83	27.85	25.09
Las Vegas-Paradise, NM	28.09	30.47	na	35.09	32.48	29.49	12.73	36.94	30.51
Lexington-Fayette, KY	13.35	12.55	12.87	11.27	8.79	12.93	9.65	24.50	12.43
Lincoln, NE	18.16	14.34	10.43	22.78	11.10	15.28	11.79	26.42	22.55
Los Angeles, CA	33.78	33.61	28.00	35.47	na	30.97	29.00	27.14	0.00
Lynchburg, VA	15.00	9.17	9.40	11.29	7.34	10.40	8.15	10.08	9.26
Madison, WI	29.47	26.11	28.54	29.60	22.63	33.50	17.72	30.68	29.30
Miami, FL	15.48	13.81	0.00	23.03	10.56	14.97	11.21	20.36	23.44
Milwaukee-Racine-Waukesha, WI	31.60	28.41	27.82	30.08	25.79	33.65	18.01	33.00	28.96
Modesto, CA	31.58	33.25	25.88	32.72	28.13	33.25	22.72	31.33	30.51
Montgomery, AL	9.50	11.03	9.83	23.40	8.89	12.31	11.50	12.53	9.50
Nassau-Suffolk, NY	49.67	33.52	44.40	44.00	33.50	44.90	35.50	42.50	40.50
New Haven, CT	30.50	26.65	30.50	33.50	26.87	33.57	38.40	29.50	31.50
New Orleans-Metairie-Kenner, LA	na	13.68	12.28	21.27	14.88	24.27	12.28	13.26	18.70
Oakland-Fremont-Hayward, CA	36.10	33.25	25.88	42.26	30.91	43.24	27.80	44.90	30.51
Ogden-Clearfield, UT	na	12.65	17.41	26.51	na	18.47	25.71	25.71	11.12
Orlando-Kissimmee, FL	12.57	10.72	10.37	10.41	9.01	11.69	9.83	9.84	18.04
Palm Bay-Melbourne-Titusville, FL	13.46	11.78	11.40	12.89	9.15	10.94	10.48	10.89	12.01
Phoenix-Mesa-Scottsdale, AZ	21.97	22.00	15.25	22.35	17.70	15.00	na	25.82	24.17
Pittsburgh, PA	25.38	26.37	23.29	29.92	23.74	29.38	24.39	28.97	29.13
Port St. Lucie-Fort Pierce, FL	11.85	10.76	10.52	10.79	8.63	12.84	10.00	9.47	8.83
Portland, ME	14.78	16.45	11.96	25.80	11.03	16.78	11.70	15.49	20.15
Poughkeepsie-Middletown, NY	35.11	24.40	35.11	37.24	23.80	26.00	33.08	36.58	31.10
Richmond, VA	17.62	12.39	11.52	22.74	11.09	13.22	9.73	10.87	17.08
Riverside-San Bernardino-Ontario, CA	32.69	35.51	28.00	32.37	28.47	33.86	29.90	36.08	30.51
Roanoke, VA	16.51	11.04	8.36	10.50	7.95	10.91	10.42	9.11	11.15
Salinas, CA	31.51	27.37	25.88	35.84	30.91	37.75	32.73	36.49	30.51
Salt Lake City-Ogden-Clearfield, UT	11.75	15.67	20.32	26.29	16.85	na	13.36	25.71	21.22
San Francisco--Redwood City, CA	36.58	33.25	25.88	47.36	32.50	45.57	29.87	43.11	30.51
Santa Ana-Anaheim-Irvine, CA	32.83	35.51	28.00	35.47	26.84	30.97	29.90	33.47	30.51
Sarasota-Bradenton-Venice, FL	7.78	6.39	6.63	6.88	5.15	6.97	6.17	7.21	na
Savannah, GA	10.49	9.48	9.16	20.10	8.88	12.14	6.80	8.12	16.36
Scranton--Wilkes-Barre, PA	26.13	22.52	24.78	27.39	21.90	28.85	23.70	26.50	27.07
Seattle-Bellevue-Everett, WA	32.16	30.34	32.69	35.02	19.91	na	26.42	34.24	32.40

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
Spokane, WA	25.51	25.01	24.68	24.67	15.09	29.14	22.02	25.45	28.22
Springfield, IL	25.04	23.32	21.80	19.90	26.39	32.04	25.25	23.97	25.40
Stockton, CA	31.58	26.02	25.88	33.60	28.13	33.25	22.72	28.72	30.51
Tacoma, WA	32.16	30.34	32.69	32.71	19.91	35.55	25.75	34.24	32.40
Tampa-St. Petersburg-Clearwater, FL	11.88	10.79	10.42	10.25	9.28	11.26	9.65	10.75	9.94
Toledo, OH	23.83	22.38	25.31	21.99	23.81	27.21	24.50	21.87	26.12
Tucson, AZ	23.55	22.00	15.25	20.20	17.70	24.25	na	26.00	24.17
Warren-Troy-Farmington Hills, MI	32.29	26.96	28.93	33.24	24.19	31.38	27.52	31.67	20.84
West Palm Beach--Boynton Beach, FL	16.00	13.85	na	15.49	11.72	24.11	12.58	13.77	18.89
Wilmington, NC	7.10	6.02	5.68	6.22	5.15	6.52	5.91	6.38	6.66

Table 13: BLS Average Wages by Metro Areas

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
Akron, OH	23.36	20.42	23.77	21.51	17.42	19.35	16.55	20.46	25.63
Albuquerque, NM	14.39	14.38	14.24	18.16	13.29	19.49	12.38	18.15	17.48
Anchorage, AK	30.37	26.66	26.58	29.79	18.95	27.27	21.81	22.49	26.37
Appleton, WI	21.83	17.14	15.9	21.65	18.72	24.84	16.77	21.49	18.39
Asheville, NC	13.25	13.77	11.32	16.27	12.54	17.07	12.8	12.77	14.28
Bakersfield, CA	23.37	20.52	15.07	24.64	17.62	19.79	12.09	16.89	27.44
Baltimore-Towson, MD	19.15	19.03	18.05	21.72	17.47	22.44	18.88	19.46	23.23
Bethesda, MD	20.91	21.28	18.05	21.11	17.05	23.24	16.92	17.73	21.39
Billings, MT	16.3	14.07	18.41	21.26	18.1	22.95	14.92	15.26	19.66
Birmingham-Hoover, AL	19.23	15.48	15.48	19.33	13.08	17.65	12.92	15.11	19.05
Boise City-Nampa, ID	21.47	14.15	13.94	20.06	10.73	19.46	15.09	17.97	14.74
Bridgeport-Stamford-Norwalk, CT	27.89	23.75	22.92	22.94	19.08	25.24	18.87	19.34	31.86
Buffalo-Niagara Falls, NY	23.33	18.69	16.81	25.51	18.32	24.26	16.59	20.63	24.78
Camden, NJ Metropolitan Division	27.94	22.7	24.71	27.99	18.83	26.67	20.43	26.53	32.57
Cedar Rapids, IA	19.31	15.31	17.11	25.19	18.5	19.41	16.67	21.12	19.81
Charleston, WV	20.72	17.13	21.96	22.31	17.91	22.49	15.84	15.93	16.56
Charleston-North Charleston, SC	15.16	15.39	13.83	17.96	14.61	16.52	12.32	14.17	18.06
Cleveland-Elyria-Mentor, OH	25.01	18.66	21.48	25.04	16.78	25.59	16.52	23.85	25.67
Colorado Springs, CO	23.66	18.5	15.35	20.05	15.93	20.42	13.24	20.99	21.92
Dayton, OH	20.46	19.27	18.2	23.5	15.78	22.76	16.28	21.69	22.37
Denver-Aurora, CO	19.12	19.18	15.48	22.05	16.21	20.39	13.45	17.12	21.27
Des Moines-West Des Moines, IA	25.27	18.35	17.83	22.94	15.25	20.79	16.15	20.25	24.47
Edison, NJ Metropolitan Division	22.9	24.56	22.02	27.36	19.12	29.23	31.06	24.23	27.47
El Paso, TX	11.59	10.83	10.9	15.38	10.05	14.71	9.72	13.55	11.83
Erie, PA	19.16	15.39	15.82	23.83	14.23	21.38	16.9	22.27	21.5
Fort Wayne, IN	20.07	18.39	15.89	22.46	13.9	24.06	15.55	19.52	24.78
Grand Rapids-Wyoming, MI	20.15	17.65	18.28	22.75	17.07	22.58	14.15	22.87	23.08
Harrisburg-Carlisle, PA	22.1	18.38	17.72	21.82	14.93	19.48	16.33	18.66	17.7
Harrisonburg, VA	18.73	16.48	12.45	17.81	12.3	17.55	14.63	13.9	15.07
Hartford, CT	25.59	21.98	26.82	26.02	17.75	24.9	19.11	23.25	29.23
Honolulu, HI	26.96	26.97	27.06	27.64	23.89	23.08	23.47	28.46	24.87
Jackson, MS	15.69	13.75	14.83	17.91	14.48	15.38	13.87	13.36	13.42
Jacksonville, FL	16.92	15.9	14.04	17.44	13.48	16.97	12.89	19.44	17.83
Kennewick-Richland-Pasco, WA	26.6	20.81	20.11	29.08	17.76	27.83	18.48	23.42	29.27
Knoxville, TN	16.85	15.1	15.18	20.79	13.92	18.64	12.67	17.52	18.04
Lakeland, FL	17.65	14.37	12.78	18.5	13.52	16.87	12.13	13.61	17.8
Lancaster, PA	21.29	17.61	17.25	19.84	15.42	22.81	16.48	22.87	20.16
Las Vegas-Paradise, NV	21.51	20.36	19.83	23.99	19.74	21.1	17.83	25.01	29.83
Lexington-Fayette, KY	19.41	15.92	15.23	19.51	12.23	21.15	12.78	16.92	17.94
Lincoln, NE	22.59	18.42	15.15	18.22	13.91	21.05	14.78	19.58	14.78

	Brickmasons and blockmasons	Carpenters	Cement masons and concrete finishers	Electricians	Painters, construction and maintenance	Plumbers, pipefitters, and steamfitters	Roofers	Sheet metal workers	Structural iron and steel workers
Los Angeles, CA	21.66	22.93	20.2	25.38	18.25	20.71	20.46	21.77	25.7
Lynchburg, VA	20.65	14.74	13.06	16.63	11.88	18.57	13.1	13.51	17.75
Madison, WI	25.95	19.62	19.45	23.34	19.36	27.83	17.86	26.62	21.86
Miami-Miami Beach-Kendall, FL	15.9	14.77	14.4	18.15	14.92	18.92	14.48	17	18.16
Milwaukee, WI	25.99	21.97	20.07	24.44	17.2	29.43	18.22	25.04	25.14
Modesto, CA	18.57	20.94	14.11	26.88	17.31	22.94	22.36	22.35	15.57
Montgomery, AL	14.58	14.24	12.32	15.38	13.12	11.19	11.86	13.54	15.72
Nassau-Suffolk, NY	25.5	24.89	23.77	27.72	19.49	30.23	25.27	32.33	37.43
New Haven, CT	27.21	22.69	18.68	25.59	20.17	27.33	19.28	24.41	25.79
New Orleans-Metairie-Kenner, LA	18.04	15.49	14.24	20.73	15.24	17.88	14.58	15.01	18.42
Oakland-Fremont-Hayward, CA	28.43	26.18	23.38	33.2	19.49	26.9	18.72	24.9	29.98
Ogden-Clearfield, UT	22.38	16.32	15.79	18.91	16.89	24.26	17.73	20.58	14.39
Orlando-Kissimmee, FL	18.02	15.73	15.95	15.87	13.05	16.34	13.96	14.45	17.03
Palm Bay-Melbourne-Titusville, FL	18.71	16.77	14.21	17.79	14.01	16.05	13.31	15.68	14.93
Phoenix-Mesa-Scottsdale, AZ	17.03	16.9	16.82	17.79	14.05	18.07	14.18	16.27	15.66
Pittsburgh, PA	21.95	18.53	21.23	24.18	21.54	25.96	16.41	23.29	25.65
Port St. Lucie-Fort Pierce, FL	17.39	16.92	15.34	16.41	16.01	16.11	14.37	12.94	16.73
Portland, ME	19.26	17.35	15.44	21.63	12.84	18.48	16.67	17.02	21.44
Poughkeepsie-Middletown, NY	26.65	21.52	21.77	24.63	19.23	0	20.16	28.85	29.66
Richmond, VA	19.74	17.85	14.61	20.54	14.44	17.95	15.03	15.06	17.31
Riverside, CA	20.52	21.38	19.34	20.15	14.7	18.44	17.65	18.73	21.09
Roanoke, VA	19.58	14.47	12.92	15.25	13.04	15.7	13.35	15.4	12.64
Salinas, CA	24.62	23.88	24.04	26.38	19.38	18.44	20.14	27.02	28.6
Salt Lake City, UT	19.12	15.95	14.85	19.34	14.77	20.42	14.88	17.73	19
San Francisco--Redwood City, CA	34.6	25.95	24.06	34.31	21.96	30.8	23.91	27.6	18.57
Santa Ana-Anaheim-Irvine, CA	14.49	23.25	21.84	21.62	17.43	21.76	17.93	20.06	22.14
Sarasota-Bradenton-Venice, FL	17.8	15.26	14.46	16.37	15.72	16.43	15.16	13.91	14.84
Savannah, GA	17.15	14.72	16.33	19.83	12.8	17.88	13.64	17.27	14.89
Scranton--Wilkes-Barre, PA	17.56	18.13	19.27	22.92	18.53	23.34	12.2	21.13	26.97
Seattle-Bellevue-Everett, WA	28.27	24.19	26.42	24.47	17.4	27.76	23.22	23.26	26.27
Spokane, WA	24.79	17.75	21.08	20.24	15.19	24.99	17.79	20.42	18.35
Springfield, IL	23.93	20.4	18.28	26.99	19.07	25.75	21.82	20.2	27.1
Stockton, CA	20.82	22.17	17.23	23.1	16.82	21.42	16.48	21.27	19.38
Tacoma, WA	29.38	20.67	18.75	23.24	17.92	22.4	23.16	29.59	27.99
Tampa, FL	16.68	14.73	13.82	16.42	13.68	15.86	14.07	15.56	15.67
Toledo, OH	25.53	18.3	22.7	26.11	21.2	26.56	20.25	22.75	25.88
Tucson, AZ	20.27	15.89	15.45	18.63	12.99	19.01	15	14.96	16.36
Warren-Troy-Farmington Hills, MI	24.21	23.64	23.25	29.37	22.9	27.31	20.94	24.45	22.26
West Palm Beach, FL	18.06	16.89	14.33	18.66	14.32	16.82	14.63	16.33	23.35
Wilmington, NC	11.22	14.28	12.94	16.79	12.86	14.94	13.29	16.46	15.19

ABOUT THE AUTHORS

Paul Bachman, MSIE. Mr. Bachman is the Director of Research at the Beacon Hill Institute. He manages the institute's research projects, including the STAMP model and conducts research for other projects. Mr. Bachman has authored researcher papers on state and national tax policy and labor policy.

Sarah Glassman, MSEP. Ms. Glassman is Director of Operations at the Beacon Hill Institute. She holds a Master of Science in Economic Policy from Suffolk University.

Michael Head, MSEP. Mr. Head is a Research Economist at the Beacon Hill Institute for Public Policy Research at Suffolk University. He holds a Master of Science in Economic Policy from Suffolk University.

David G. Tuerck, PhD. Dr. Tuerck is Executive Director of the Beacon Hill Institute for Public Policy Research at Suffolk University and Chairman of the Economics Department at Suffolk University. He holds a Doctorate in Economics from the University of Virginia. His dissertation director was James M. Buchanan, Nobel Laureate in Economics.

The Beacon Hill Institute at Suffolk University in Boston focuses on federal, state and local economic policies as they affect citizens and businesses. The institute conducts research and educational programs to provide timely, concise and readable analyses that help voters, policymakers and opinion leaders understand today's leading public policy issues.

©February 2008 by the Beacon Hill Institute at Suffolk University



The Beacon Hill Institute for Public Policy Research
Suffolk University
8 Ashburton Place
Boston, MA 02108
Phone: 617-573-8750 Fax: 617-994-4279
bhi@beaconhill.org
<http://www.beaconhill.org>

EXHIBIT C

General Decision Number: MI150084 01/02/2015 MI84

Superseded General Decision Number: MI20140084

State: Michigan

Construction Type: Building

County: Ingham County in Michigan.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015

ASBE0047-002 07/01/2013

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 28.82	15.78

BOIL0169-001 01/01/2014

	Rates	Fringes
BOILERMAKER.....	\$ 32.78	28.39

BRMI0009-009 12/01/2013

	Rates	Fringes
BRICKLAYER		
Bricklayer.....	\$ 27.37	17.20
Terrazzo and Tile Finisher..	\$ 17.67	13.40
Terrazzo and Tile Setter....	\$ 21.02	15.42

FOOTNOTE:

Paid Holiday: Fourth of July, if the worker was employed by the contractor in any period of seven working days before said holiday within the current calendar year.

CARP1004-004 07/01/2014

	Rates	Fringes
CARPENTER (Soft Floor Layer, Including Carpet & Resilient Flooring).....	\$ 24.37	17.30

CARP1004-018 07/01/2014		

	Rates	Fringes
CARPENTER, Includes Acoustical Ceiling Installation, Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 24.37	17.30

CARP1102-002 06/01/2013		

	Rates	Fringes
MILLWRIGHT.....	\$ 31.11	28.64

ELEC0252-001 06/03/2013		

Townships of Bunker Hill, Leslie, Onodaga & Stockbridge

	Rates	Fringes
ELECTRICIAN		
Alarm Installation & Low Voltage Wiring.....	\$ 25.72	13.87
Excludes Alarm Installation and Low Voltage Wiring.....	\$ 39.03	20.88

ELEC0665-004 06/01/2013		

Townships of Alaiedon, Aurelius, Delhi, Ingham, Lansing, Leroy,
Locke, Meridian, Vevay, Wheatfield, White Oak and Williamson

	Rates	Fringes
ELECTRICIAN		
Alarm Installation & Low Voltage Wiring.....	\$ 26.62	13.95
Excludes Alarm Installation & Low Voltage Wiring.....	\$ 31.33	20.01

ENGI0324-012 07/01/2014		

	Rates	Fringes
OPERATOR: Power Equipment		
GROUP 1.....	\$ 29.09	21.70
GROUP 2.....	\$ 28.84	21.70
GROUP 3.....	\$ 27.74	21.70
GROUP 4.....	\$ 22.94	21.70
GROUP 5.....	\$ 22.34	21.70
GROUP 6.....	\$ 19.89	21.70

GROUP 7.....\$ 18.19

21.70

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 per hour above the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 per hour above the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane operator with main boom and jib 400', 300', or 220' or longer.

GROUP 2: Crane operator with main boom and jib 140' or longer, tower crane, gantry crane, whirley derrick

GROUP 3: Concrete Pump; Crane; Highlift; Hoist; Loader; Roller; Scraper; Stiff Leg Derrick; Trencher

GROUP 4: Bobcat/Skid Loader; Broom/Sweeper; Fork Truck (over 20' lift)

GROUP 5: Boom Truck (non-swinging)

GROUP 6: Fork Truck (20' lift and under for masonry work)

GROUP 7: Oiler

IRON0025-001 06/01/2014

	Rates	Fringes
IRONWORKER		
REINFORCING.....	\$ 28.30	24.60
STRUCTURAL (Excluding Metal Building Erection)....	\$ 33.78	26.97

* LAB00499-012 10/01/2014

	Rates	Fringes
LABORER		
Common or General; Grade Checker; Mason Tender - Brick; Mason Tender - Cement/Concrete; Pipelayer; Sandblaster.....	\$ 22.29	12.75

PAIN0845-001 11/01/2014

	Rates	Fringes
PAINTER: Brush, Roller, Spray and Paperhanging.....	\$ 22.14	11.97
PAINTER: Drywall Finishing/Taping.....	\$ 24.00	12.89

PLAS0016-011 04/01/2014

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER.....	\$ 24.64	12.88

PLUM0333-006 06/01/2013

	Rates	Fringes
PIPEFITTER, Includes HVAC Pipe and Unit Installation.....	\$ 33.19	19.78
PLUMBER, Excludes HVAC Pipe and Unit Installation.....	\$ 33.19	19.78

FOOTNOTE:

Paid Holidays: Memorial Day, Independence Day and Labor Day,
if the employee works the work day preceding and following
the holiday unless proven illness or injury prevents the
employee from working.

ROOF0070-003 06/01/2014

	Rates	Fringes
ROOFER.....	\$ 26.63	13.22

SFMI0669-001 07/01/2013

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 31.25	17.12

SHEE0007-004 05/01/2014

	Rates	Fringes
SHEET METAL WORKER (Including HVAC Duct Installation; Excluding HVAC System Installation).....	\$ 27.82	19.55

SUMI2011-009 02/01/2011

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 18.48	7.93
LABORER: Landscape & Irrigation.....	\$ 8.00	0.00
METAL BUILDING ERECTOR.....	\$ 16.92	6.32
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 21.34	7.57
OPERATOR: Bulldozer.....	\$ 20.63	8.21

OPERATOR: Grader/Blade.....\$ 22.00	6.29
OPERATOR: Tractor.....\$ 19.10	8.48
TRUCK DRIVER: Dump Truck.....\$ 16.00	7.26
TRUCK DRIVER: Lowboy Truck.....\$ 14.50	0.44
TRUCK DRIVER: Tractor Haul Truck.....\$ 13.57	1.18

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and

the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION



EXHIBIT D

Economic News Release

 SHARE ON:    CPS  FONT SIZE:   PRINT: 

Table 3. Union affiliation of employed wage and salary workers by occupation and industry

Table 3. Union affiliation of employed wage and salary workers by occupation and industry, 2013-2014 annual averages

[Numbers in thousands]

Occupation and industry	2013					2014				
	Total employed	Members of unions(1)		Represented by unions(2)		Total employed	Members of unions(1)		Represented by unions(2)	
		Total	Percent of employed	Total	Percent of employed		Total	Percent of employed	Total	Percent of employed
OCCUPATION										
Management, professional, and related occupations	47,723	5,726	12.0	6,490	13.6	48,890	5,835	11.9	6,612	13.5
Management, business, and financial operations occupations	18,334	804	4.4	961	5.2	18,717	870	4.6	1,016	5.4
Management occupations	12,174	493	4.1	596	4.9	12,550	562	4.5	653	5.2
Business and financial operations occupations	6,159	311	5.0	365	5.9	6,168	308	5.0	362	5.9
Professional and related occupations	29,389	4,922	16.7	5,529	18.8	30,173	4,965	16.5	5,597	18.5
Computer and mathematical occupations	3,767	163	4.3	208	5.5	4,057	169	4.2	223	5.5
Architecture and engineering occupations	2,666	194	7.3	224	8.4	2,635	160	6.1	190	7.2
Life, physical, and social science occupations	1,178	118	10.0	147	12.5	1,232	122	9.9	149	12.1
Community and social service occupations	2,263	361	16.0	390	17.2	2,373	358	15.1	396	16.7
Legal occupations	1,424	76	5.4	88	6.2	1,440	86	6.0	107	7.5
Education, training, and library occupations	8,457	2,986	35.3	3,304	39.1	8,437	2,976	35.3	3,279	38.9
Arts, design, entertainment, sports, and media occupations	2,043	120	5.9	138	6.8	2,071	117	5.6	137	6.6
Healthcare practitioner and technical occupations	7,591	903	11.9	1,029	13.6	7,928	977	12.3	1,115	14.1
Service occupations	23,390	2,491	10.6	2,701	11.5	23,481	2,498	10.6	2,740	11.7
Healthcare support occupations	3,364	314	9.3	347	10.3	3,326	305	9.2	346	10.4
Protective service occupations	3,107	1,096	35.3	1,160	37.3	3,128	1,103	35.3	1,166	37.3
Food preparation and serving related occupations	8,037	341	4.2	375	4.7	8,021	338	4.2	389	4.9
Building and grounds cleaning and maintenance occupations	4,708	488	10.4	534	11.3	4,916	504	10.2	560	11.4
Personal care and service occupations	4,174	252	6.0	285	6.8	4,090	248	6.1	279	6.8
Sales and office occupations	30,637	2,008	6.6	2,220	7.2	30,903	2,023	6.5	2,277	7.4
Sales and related occupations	13,316	381	2.9	437	3.3	13,529	415	3.1	499	3.7
Office and administrative support occupations	17,321	1,627	9.4	1,783	10.3	17,374	1,608	9.3	1,778	10.2
Natural resources, construction, and maintenance occupations	11,195	1,866	16.7	2,000	17.9	11,627	1,782	15.3	1,909	16.4
Farming, fishing, and forestry occupations	861	18	2.1	22	2.5	935	24	2.5	30	3.2

Construction and extraction occupations	5,809	1,119	19.3	1,181	20.3	6,196	1,104	17.8	1,167	18.8
Installation, maintenance, and repair occupations	4,525	729	16.1	797	17.6	4,496	655	14.6	711	15.8
Production, transportation, and material moving occupations	16,165	2,438	15.1	2,617	16.2	16,530	2,438	14.8	2,614	15.8
Production occupations	7,936	1,070	13.5	1,156	14.6	8,098	1,066	13.2	1,150	14.2
Transportation and material moving occupations	8,229	1,367	16.6	1,461	17.8	8,432	1,372	16.3	1,464	17.4
INDUSTRY										
Private sector	108,681	7,318	6.7	8,128	7.5	111,228	7,359	6.6	8,224	7.4
Agriculture and related industries	1,096	11	1.0	13	1.2	1,199	14	1.1	19	1.6
Nonagricultural industries	107,585	7,307	6.8	8,114	7.5	110,028	7,345	6.7	8,205	7.5
Mining, quarrying, and oil and gas extraction	1,026	55	5.4	67	6.6	1,040	50	4.8	61	5.9
Construction	6,474	915	14.1	967	14.9	6,968	968	13.9	1,023	14.7
Manufacturing	14,195	1,431	10.1	1,558	11.0	14,471	1,409	9.7	1,517	10.5
Durable goods	8,933	883	9.9	956	10.7	9,111	876	9.6	944	10.4
Nondurable goods	5,262	549	10.4	602	11.4	5,359	534	10.0	572	10.7
Wholesale and retail trade	17,998	838	4.7	927	5.2	18,372	769	4.2	892	4.9
Wholesale trade	3,235	163	5.0	184	5.7	3,232	107	3.3	129	4.0
Retail trade	14,763	675	4.6	743	5.0	15,141	662	4.4	763	5.0
Transportation and utilities	5,563	1,144	20.6	1,212	21.8	5,750	1,153	20.1	1,217	21.2
Transportation and warehousing	4,686	920	19.6	974	20.8	4,814	945	19.6	996	20.7
Utilities	877	225	25.6	238	27.1	935	209	22.3	221	23.7
Information(3)	2,582	231	8.9	251	9.7	2,681	231	8.6	255	9.5
Publishing, except Internet	541	26	4.7	30	5.5	581	21	3.6	22	3.8
Motion pictures and sound recording industries	337	32	9.5	34	10.0	347	25	7.3	29	8.2
Radio and television broadcasting and cable subscription programming	538	30	5.5	34	6.3	569	40	7.0	43	7.6
Telecommunications	916	132	14.4	141	15.4	915	135	14.8	151	16.5
Financial activities	8,515	170	2.0	219	2.6	8,481	169	2.0	200	2.4
Finance and insurance	6,392	84	1.3	118	1.8	6,409	92	1.4	112	1.8
Finance	4,090	39	1.0	61	1.5	4,039	53	1.3	63	1.6
Insurance	2,302	45	2.0	56	2.5	2,370	39	1.6	49	2.1
Real estate and rental and leasing	2,123	86	4.0	102	4.8	2,071	77	3.7	88	4.2
Professional and business services	12,890	304	2.4	371	2.9	13,300	309	2.3	389	2.9
Professional and technical services	7,711	115	1.5	154	2.0	8,045	109	1.4	157	2.0
Management, administrative, and waste services	5,179	189	3.6	217	4.2	5,254	199	3.8	232	4.4
Education and health services	20,596	1,718	8.3	1,961	9.5	21,147	1,728	8.2	2,003	9.5
Educational services	4,169	536	12.9	628	15.1	4,338	508	11.7	599	13.8
Health care and social assistance	16,426	1,182	7.2	1,333	8.1	16,809	1,220	7.3	1,404	8.4
Leisure and hospitality	11,973	326	2.7	386	3.2	11,997	387	3.2	454	3.8
Arts, entertainment, and recreation	2,248	118	5.2	130	5.8	2,166	140	6.5	158	7.3
Accommodation and food services	9,726	208	2.1	257	2.6	9,831	247	2.5	296	3.0
Accommodation	1,354	95	7.0	108	8.0	1,455	130	8.9	143	9.8
Food services and drinking places	8,372	113	1.3	149	1.8	8,377	117	1.4	153	1.8
Other services(3)	5,774	175	3.0	194	3.4	5,821	171	2.9	193	3.3
Other services, except private households	5,056	163	3.2	182	3.6	5,026	157	3.1	178	3.5
Public sector	20,429	7,210	35.3	7,900	38.7	20,203	7,218	35.7	7,927	39.2
Federal government	3,515	932	26.5	1,096	31.2	3,408	939	27.5	1,078	31.6
State government	6,353	1,966	30.9	2,147	33.8	6,264	1,867	29.8	2,056	32.8

Local government	10,561	4,311	40.8	4,658	44.1	10,532	4,412	41.9	4,793	45.5
-------------------------	--------	-------	------	-------	------	--------	-------	------	-------	------

Footnotes

(1) Data refer to members of a labor union or an employee association similar to a union.

(2) Data refer to both union members and workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.

(3) Includes other industries, not shown separately.

NOTE: Data refer to the sole or principal job of full- and part-time wage and salary workers. All self-employed workers are excluded, both those with incorporated businesses as well as those with unincorporated businesses. Updated population controls are introduced annually with the release of January data.

Table of Contents

Last Modified Date: January 23, 2015

RECOMMEND THIS PAGE USING:  Facebook  Twitter  LinkedIn

TOOLS

Areas at a Glance
Industries at a Glance
Economic Releases
Databases & Tables
Maps

CALCULATORS

Inflation
Location Quotient
Injury And Illness

HELP

Help & Tutorials
FAQs
Glossary
About BLS
Contact Us

INFO

What's New
Careers @ BLS
Find It! DOL
Join our Mailing Lists
Linking & Copyright Info

RESOURCES

Inspector General (OIG)
Budget and Performance
No Fear Act
USA.gov
Benefits.gov
Disability.gov

[Freedom of Information Act](#) | [Privacy & Security Statement](#) | [Disclaimers](#) | [Customer Survey](#) | [Important Web Site Notices](#)

U.S. Bureau of Labor Statistics | Division of Labor Force Statistics, PSB Suite 4675, 2 Massachusetts Avenue, NE Washington, DC 20212-0001
www.bls.gov/CPS | Telephone: 1-202-691-6378 | [Contact CPS](#)

EXHIBIT E

Union Membership, Coverage, Density and Employment by Combined Statistical Area (CSA) and MSA, 2014 (details in table note)

Note: Sample size (Obs) for many cells are small and should be used with care.

Area definitions beginning May 2004 do not match prior definitions.

Code	Metropolitan Area	Sector	Obs	Employment	Members	Covered	%Mem	%Cov
CSAs (combination of 2 or more MSAs; separate MSAs are shown further down):								
CSA Code	118 Appleton-Oshkosh-Neenah, WI	Total	272	219,024	24,617	27,377	11.2	12.5
	Appleton-Oshkosh-Neenah, WI	Private	236	190,544	15,412	16,892	8.1	8.9
	Appleton-Oshkosh-Neenah, WI	Public	36	28,480	9,206	10,485	32.3	36.8
	Appleton-Oshkosh-Neenah, WI	Priv Const	13	10,571	1,528	1,528	14.5	14.5
	Appleton-Oshkosh-Neenah, WI	Priv Manuf	64	51,339	12,236	12,236	23.8	23.8
715	Boston-Worcester-Manchester, MS-NH-CT-ME	Total	2,617	2,069,130	266,264	285,265	12.9	13.8
	Boston-Worcester-Manchester, MS-NH-CT-ME	Private	2,262	1,782,853	93,252	105,501	5.2	5.9
	Boston-Worcester-Manchester, MS-NH-CT-ME	Public	355	286,277	173,012	179,764	60.4	62.8
	Boston-Worcester-Manchester, MS-NH-CT-ME	Priv Const	117	91,457	15,856	16,010	17.3	17.5
	Boston-Worcester-Manchester, MS-NH-CT-ME	Priv Manuf	314	184,654	7,711	7,894	4.2	4.3
720	Bridgeport-New Haven-Stamford, CT	Total	1,499	639,514	91,294	95,497	14.3	14.9
	Bridgeport-New Haven-Stamford, CT	Private	1,303	556,676	33,694	35,573	6.1	6.4
	Bridgeport-New Haven-Stamford, CT	Public	196	82,838	57,600	59,924	69.5	72.3
	Bridgeport-New Haven-Stamford, CT	Priv Const	75	32,857	5,737	5,737	17.5	17.5
	Bridgeport-New Haven-Stamford, CT	Priv Manuf	142	58,093	4,347	4,347	7.5	7.5
176	Chicago-Naperville-Michigan City, IL-IN-WI	Total	3,986	4,187,752	641,001	680,298	15.3	16.2
	Chicago-Naperville-Michigan City, IL-IN-WI	Private	3,495	3,677,103	354,215	378,911	9.6	10.3
	Chicago-Naperville-Michigan City, IL-IN-WI	Public	491	510,649	286,786	301,387	56.2	59
	Chicago-Naperville-Michigan City, IL-IN-WI	Priv Const	172	180,612	67,514	69,357	37.4	38.4
	Chicago-Naperville-Michigan City, IL-IN-WI	Priv Manuf	529	553,853	70,861	75,116	12.8	13.6
184	Cleveland-Akron-Elvira, OH	Total	1,139	1,234,025	148,169	159,065	12	12.9
	Cleveland-Akron-Elvira, OH	Private	1,015	1,101,974	74,870	79,605	6.8	7.2
	Cleveland-Akron-Elvira, OH	Public	124	132,050	73,300	79,460	55.5	60.2
	Cleveland-Akron-Elvira, OH	Priv Const	47	49,398	11,799	11,799	23.9	23.9
	Cleveland-Akron-Elvira, OH	Priv Manuf	191	204,446	20,710	21,939	10.1	10.7
212	Dayton-Springfield-Greenville, OH	Total	354	388,821	47,402	54,917	12.2	14.1
	Dayton-Springfield-Greenville, OH	Private	298	327,453	20,817	23,995	6.4	7.3
	Dayton-Springfield-Greenville, OH	Public	56	61,368	26,585	30,922	43.3	50.4
	Dayton-Springfield-Greenville, OH	Priv Const	14	15,004	3,998	3,998	26.6	26.6

Dayton-Springfield-Greenville, OH	Priv Manuf	45	48,641	0	0	0	0
216 Denver-Aurora-Boulder, CO	Total	2,196	1,461,057	119,056	139,648	8.1	9.6
Denver-Aurora-Boulder, CO	Private	1,859	1,233,202	70,527	78,415	5.7	6.4
Denver-Aurora-Boulder, CO	Public	337	227,856	48,529	61,232	21.3	26.9
Denver-Aurora-Boulder, CO	Priv Const	151	106,535	9,367	9,902	8.8	9.3
Denver-Aurora-Boulder, CO	Priv Manuf	138	94,085	6,315	6,315	6.7	6.7
220 Detroit-Warren-Flint, MI	Total	1,997	2,198,405	328,810	351,123	15	16
Detroit-Warren-Flint, MI	Private	1,779	1,963,311	203,908	219,862	10.4	11.2
Detroit-Warren-Flint, MI	Public	218	235,094	124,902	131,261	53.1	55.8
Detroit-Warren-Flint, MI	Priv Const	67	72,870	20,906	20,906	28.7	28.7
Detroit-Warren-Flint, MI	Priv Manuf	390	420,921	78,813	79,742	18.7	18.9
260 Fresno-Madera, CA	Total	390	418,813	77,566	82,653	18.5	19.7
Fresno-Madera, CA	Private	287	312,431	17,518	19,402	5.6	6.2
Fresno-Madera, CA	Public	103	106,382	60,048	63,251	56.4	59.5
Fresno-Madera, CA	Priv Const	23	26,279	1,932	1,932	7.3	7.3
Fresno-Madera, CA	Priv Manuf	22	23,870	0	0	0	0
266 Grand Rapids-Muskegon-Holland, MI	Total	599	633,466	65,169	72,044	10.3	11.4
Grand Rapids-Muskegon-Holland, MI	Private	540	573,646	36,892	43,045	6.4	7.5
Grand Rapids-Muskegon-Holland, MI	Public	59	59,820	28,277	28,999	47.3	48.5
Grand Rapids-Muskegon-Holland, MI	Priv Const	16	16,998	0	0	0	0
Grand Rapids-Muskegon-Holland, MI	Priv Manuf	119	125,153	10,745	13,162	8.6	10.5
268 Greensboro-Winston-Salem-High Point, NC	Total	487	572,387	15,814	21,757	2.8	3.8
Greensboro-Winston-Salem-High Point, NC	Private	415	484,356	7,242	8,527	1.5	1.8
Greensboro-Winston-Salem-High Point, NC	Public	72	88,031	8,573	13,231	9.7	15
Greensboro-Winston-Salem-High Point, NC	Priv Const	23	30,734	0	0	0	0
Greensboro-Winston-Salem-High Point, NC	Priv Manuf	104	119,481	3,569	4,854	3	4.1
272 Greenville-Anderson-Seneca, SC	Total	344	322,884	5,175	7,298	1.6	2.3
Greenville-Anderson-Seneca, SC	Private	302	283,040	3,059	4,551	1.1	1.6
Greenville-Anderson-Seneca, SC	Public	42	39,844	2,117	2,747	5.3	6.9
Greenville-Anderson-Seneca, SC	Priv Const	19	17,409	837	1,628	4.8	9.4
Greenville-Anderson-Seneca, SC	Priv Manuf	57	52,652	1,056	1,056	2	2
290 Huntsville-Decatur, AL	Total	300	279,488	25,236	32,567	9	11.7
Huntsville-Decatur, AL	Private	234	223,403	13,035	16,927	5.8	7.6
Huntsville-Decatur, AL	Public	66	56,085	12,201	15,640	21.8	27.9
Huntsville-Decatur, AL	Priv Const	14	13,661	0	0	0	0
Huntsville-Decatur, AL	Priv Manuf	49	48,669	2,398	2,398	4.9	4.9
294 Indianapolis-Anderson-Columbus, IN	Total	778	850,284	57,249	67,278	6.7	7.9

Indianapolis-Anderson-Columbus, IN	Private	688	753,556	41,400	50,184	5.5	6.7
Indianapolis-Anderson-Columbus, IN	Public	90	96,728	15,849	17,095	16.4	17.7
Indianapolis-Anderson-Columbus, IN	Priv Const	40	44,672	13,839	17,537	31	39.3
Indianapolis-Anderson-Columbus, IN	Priv Manuf	110	119,223	12,222	13,140	10.3	11
304 Johnson City-Kingsport-Bristol, VA	Total	128	128,444	0	1,384	0	1.1
Johnson City-Kingsport-Bristol, VA	Private	102	104,779	0	0	0	0
Johnson City-Kingsport-Bristol, VA	Public	26	23,665	0	1,384	0	5.8
Johnson City-Kingsport-Bristol, VA	Priv Const	4	3,969	0	0	0	0
Johnson City-Kingsport-Bristol, VA	Priv Manuf	19	19,870	0	0	0	0
348 Los Angeles-Long Beach-Riverside, CA	Total	5,661	6,083,094	948,030	1,017,588	15.6	16.7
Los Angeles-Long Beach-Riverside, CA	Private	4,846	5,214,195	470,532	518,375	9	9.9
Los Angeles-Long Beach-Riverside, CA	Public	815	868,899	477,498	499,213	55	57.5
Los Angeles-Long Beach-Riverside, CA	Priv Const	297	326,176	41,289	44,928	12.7	13.8
Los Angeles-Long Beach-Riverside, CA	Priv Manuf	649	697,719	41,770	47,185	6	6.8
356 Macon-Warner-Robins-Fort Valley, GA	Total	123	142,238	10,273	12,397	7.2	8.7
Macon-Warner-Robins-Fort Valley, GA	Private	94	110,620	2,292	2,292	2.1	2.1
Macon-Warner-Robins-Fort Valley, GA	Public	29	31,618	7,981	10,105	25.2	32
Macon-Warner-Robins-Fort Valley, GA	Priv Const	3	4,162	0	0	0	0
Macon-Warner-Robins-Fort Valley, GA	Priv Manuf	11	11,530	0	0	0	0
376 Milwaukee-Racine-Waukesha, WI	Total	999	759,478	77,143	81,536	10.2	10.7
Milwaukee-Racine-Waukesha, WI	Private	883	671,634	47,650	50,771	7.1	7.6
Milwaukee-Racine-Waukesha, WI	Public	116	87,844	29,494	30,766	33.6	35
Milwaukee-Racine-Waukesha, WI	Priv Const	34	25,351	9,349	9,349	36.9	36.9
Milwaukee-Racine-Waukesha, WI	Priv Manuf	193	144,570	18,725	18,725	13	13
378 Minneapolis-St. Paul-St. Cloud, MN-WI	Total	2,616	1,695,941	232,176	244,074	13.7	14.4
Minneapolis-St. Paul-St. Cloud, MN-WI	Private	2,275	1,476,762	110,162	118,634	7.5	8
Minneapolis-St. Paul-St. Cloud, MN-WI	Public	341	219,178	122,014	125,440	55.7	57.2
Minneapolis-St. Paul-St. Cloud, MN-WI	Priv Const	100	65,444	26,193	26,701	40	40.8
Minneapolis-St. Paul-St. Cloud, MN-WI	Priv Manuf	381	242,053	12,340	14,321	5.1	5.9
408 New York-Newark-Bridgeport, NY-NJ-CT-PA	Total	7,472	8,650,118	1,841,900	1,938,694	21.3	22.4
New York-Newark-Bridgeport, NY-NJ-CT-PA	Private	6,323	7,347,263	950,778	1,024,079	12.9	13.9
New York-Newark-Bridgeport, NY-NJ-CT-PA	Public	1,149	1,302,855	891,122	914,615	68.4	70.2
New York-Newark-Bridgeport, NY-NJ-CT-PA	Priv Const	374	445,568	123,489	127,258	27.7	28.6
New York-Newark-Bridgeport, NY-NJ-CT-PA	Priv Manuf	461	527,203	44,104	47,311	8.4	9
428 Philadelphia-Camden-Vineland, PA-NJ-DE-MD	Total	3,721	2,613,479	369,748	392,460	14.1	15
Philadelphia-Camden-Vineland, PA-NJ-DE-MD	Private	3,272	2,315,452	188,947	204,624	8.2	8.8
Philadelphia-Camden-Vineland, PA-NJ-DE-MD	Public	449	298,027	180,801	187,835	60.7	63

Philadelphia-Camden-Vireland, PA-NJ-DE-MD	Priv Const	166	107,543	24,283	27,289	22.6	25.4
Philadelphia-Camden-Vireland, PA-NJ-DE-MD	Priv Manuf	348	252,625	30,331	30,580	12	12.1
450 Raleigh-Durham-Cary, NC	Total	738	873,081	8,705	16,020	1	1.8
Raleigh-Durham-Cary, NC	Private	621	733,895	1,171	2,344	0.2	0.3
Raleigh-Durham-Cary, NC	Public	117	139,186	7,534	13,676	5.4	9.8
Raleigh-Durham-Cary, NC	Priv Const	50	61,063	0	0	0	0
Raleigh-Durham-Cary, NC	Priv Manuf	52	60,073	0	0	0	0
482 Salt Lake City-Ogden-Clearfield, UT	Total	1,477	814,622	33,705	39,936	4.1	4.9
Salt Lake City-Ogden-Clearfield, UT	Private	1,218	671,144	15,442	18,062	2.3	2.7
Salt Lake City-Ogden-Clearfield, UT	Public	259	143,478	18,263	21,874	12.7	15.2
Salt Lake City-Ogden-Clearfield, UT	Priv Const	107	63,546	1,031	1,518	1.6	2.4
Salt Lake City-Ogden-Clearfield, UT	Priv Manuf	165	91,478	2,604	3,016	2.8	3.3
488 San Jose-San Francisco-Oakland, CA	Total	3,189	3,627,609	618,011	648,944	17	17.9
San Jose-San Francisco-Oakland, CA	Private	2,721	3,102,209	315,918	332,192	10.2	10.7
San Jose-San Francisco-Oakland, CA	Public	468	525,399	302,093	316,751	57.5	60.3
San Jose-San Francisco-Oakland, CA	Priv Const	160	186,248	45,419	46,967	24.4	25.2
San Jose-San Francisco-Oakland, CA	Priv Manuf	370	419,249	26,310	28,280	6.3	6.7
500 Seattle-Tacoma-Olympia, WA part	Total	1,864	1,829,848	310,816	339,976	17	18.6
Seattle-Tacoma-Olympia, WA part	Private	1,591	1,568,969	181,472	195,892	11.6	12.5
Seattle-Tacoma-Olympia, WA part	Public	273	260,879	129,345	144,084	49.6	55.2
Seattle-Tacoma-Olympia, WA part	Priv Const	99	100,604	27,680	29,856	27.5	29.7
Seattle-Tacoma-Olympia, WA part	Priv Manuf	213	212,348	42,841	45,505	20.2	21.4
548 Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	Total	7,591	4,120,427	394,726	456,400	9.6	11.1
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	Private	5,629	3,087,837	134,936	159,888	4.4	5.2
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	Public	1,962	1,032,590	259,789	296,512	25.2	28.7
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	Priv Const	335	223,396	14,876	20,436	6.7	9.1
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV	Priv Manuf	210	141,729	10,282	10,713	7.3	7.6

Metropolitan Statistical Areas (sorted alphabetically):

FIPS Code	Total	312	340,042	36,751	40,923	10.8	12
10420 Akron, OH	Private	282	308,189	18,294	20,512	5.9	6.7
Akron, OH	Public	30	31,853	18,458	20,412	57.9	64.1
10500 Albany, GA	Total	71	76,735	4,771	5,959	6.2	7.8
Albany, GA	Private	51	55,543	4,771	5,959	8.6	10.7
Albany, GA	Public	20	21,192	0	0	0	0
10580 Albany-Schenectady-Troy, NY	Total	374	419,270	156,636	169,051	37.4	40.3

Albany-Schenectady-Troy, NY	Private	287	322,717	83,049	94,400	25.7	29.3
Albany-Schenectady-Troy, NY	Public	87	96,553	73,588	74,651	76.2	77.3
Albuquerque, NM	Total	786	398,411	24,631	32,476	6.2	8.2
Albuquerque, NM	Private	576	287,937	9,926	10,690	3.4	3.7
Albuquerque, NM	Public	210	110,474	14,705	21,786	13.3	19.7
10900 Allentown-Bethlehem-Easton, PA-NJ	Total	384	409,620	49,563	51,604	12.1	12.6
Allentown-Bethlehem-Easton, PA-NJ	Private	343	365,178	31,410	32,509	8.6	8.9
Allentown-Bethlehem-Easton, PA-NJ	Public	41	44,442	18,153	19,095	40.8	43
11020 Altoona, PA	Total	80	87,156	15,221	16,190	17.5	18.6
Altoona, PA	Private	69	75,243	5,260	5,260	7	7
Altoona, PA	Public	11	11,913	9,962	10,930	83.6	91.8
11100 Amarillo, TX	Total	92	109,417	6,400	8,414	5.8	7.7
Amarillo, TX	Private	79	95,592	3,453	4,362	3.6	4.6
Amarillo, TX	Public	13	13,825	2,947	4,052	21.3	29.3
11300 Anderson, IN	Total	55	56,484	6,817	6,817	12.1	12.1
Anderson, IN	Private	51	52,316	6,817	6,817	13	13
Anderson, IN	Public	4	4,168	0	0	0	0
11340 Anderson, SC	Total	66	58,680	0	701	0	1.2
Anderson, SC	Private	58	52,070	0	701	0	1.3
Anderson, SC	Public	8	6,610	0	0	0	0
11460 Ann Arbor, MI	Total	134	147,170	19,666	22,058	13.4	15
Ann Arbor, MI	Private	107	117,044	8,350	10,743	7.1	9.2
Ann Arbor, MI	Public	27	30,126	11,315	11,315	37.6	37.6
11500 Anniston-Oxford, AL	Total	71	83,155	4,116	5,060	5	6.1
Anniston-Oxford, AL	Private	56	66,185	3,099	3,099	4.7	4.7
Anniston-Oxford, AL	Public	15	16,971	1,018	1,962	6	11.6
11540 Appleton, WI	Total	175	145,028	16,902	18,382	11.7	12.7
Appleton, WI	Private	148	123,070	8,579	10,059	7	8.2
Appleton, WI	Public	27	21,958	8,323	8,323	37.9	37.9
11700 Asheville, NC	Total	126	156,043	1,143	2,430	0.7	1.6
Asheville, NC	Private	105	129,713	0	1,288	0	1
Asheville, NC	Public	21	26,331	1,143	1,143	4.3	4.3
12020 Athens-Clark County, GA	Total	59	64,700	1,914	1,914	3	3
Athens-Clark County, GA	Private	39	42,637	1,914	1,914	4.5	4.5
Athens-Clark County, GA	Public	20	22,064	0	0	0	0
12060 Atlanta-Sandy Springs-Marietta, GA	Total	2,000	2,371,577	100,382	106,991	4.2	4.5
Atlanta-Sandy Springs-Marietta, GA	Private	1,742	2,069,829	64,604	69,192	3.1	3.3

Atlanta-Sandy Springs-Marietta, GA	Public	258	301,748	35,778	37,799	11.9	12.5
12100 Atlantic City, NJ	Total	131	138,294	41,557	44,765	30	32.4
Atlantic City, NJ	Private	103	108,286	24,403	24,403	22.5	22.5
Atlantic City, NJ	Public	28	30,008	17,154	20,362	57.2	67.9
12260 Augusta-Richmond County, GA-SC	Total	177	188,144	17,055	24,720	9.1	13.1
Augusta-Richmond County, GA-SC	Private	144	152,385	7,190	12,862	4.7	8.4
Augusta-Richmond County, GA-SC	Public	33	35,759	9,865	11,858	27.6	33.2
12420 Austin-Round Rock, TX	Total	744	892,103	24,105	28,760	2.7	3.2
Austin-Round Rock, TX	Private	617	740,445	7,058	10,806	1	1.5
Austin-Round Rock, TX	Public	127	151,659	17,047	17,954	11.2	11.8
12540 Bakersfield, CA	Total	282	301,623	44,047	47,099	14.6	15.6
Bakersfield, CA	Private	231	249,430	15,892	17,921	6.4	7.2
Bakersfield, CA	Public	51	52,192	28,155	29,178	53.9	55.9
12580 Baltimore-Towson, MD	Total	1,771	1,245,454	136,382	147,290	11	11.8
Baltimore-Towson, MD	Private	1,385	978,928	45,738	50,639	4.7	5.2
Baltimore-Towson, MD	Public	386	266,526	90,644	96,651	34	36.3
70750 Bangor, ME	Total	201	43,712	2,767	3,807	6.3	8.7
Bangor, ME	Private	166	36,145	585	585	1.6	1.6
Bangor, ME	Public	35	7,567	2,181	3,222	28.8	42.6
70900 Barnstable Town, MA	Total	53	59,568	10,218	12,356	17.2	20.7
Barnstable Town, MA	Private	45	51,325	5,159	6,264	10.1	12.2
Barnstable Town, MA	Public	8	8,243	5,059	6,092	61.4	73.9
12940 Baton Rouge, LA	Total	439	379,070	20,171	23,588	5.3	6.2
Baton Rouge, LA	Private	363	316,859	15,503	16,864	4.9	5.3
Baton Rouge, LA	Public	76	62,211	4,668	6,725	7.5	10.8
13140 Beaumont-Port Author, TX	Total	143	168,676	16,576	16,576	9.8	9.8
Beaumont-Port Author, TX	Private	121	143,739	11,860	11,860	8.3	8.3
Beaumont-Port Author, TX	Public	22	24,937	4,717	4,717	18.9	18.9
13380 Bellingham, WA	Total	85	91,548	8,592	8,592	9.4	9.4
Bellingham, WA	Private	77	83,841	2,622	2,622	3.1	3.1
Bellingham, WA	Public	8	7,707	5,971	5,971	77.5	77.5
13460 Bend, OR	Total	158	108,184	8,098	8,811	7.5	8.1
Bend, OR	Private	142	97,441	3,449	3,449	3.5	3.5
Bend, OR	Public	16	10,742	4,649	5,362	43.3	49.9
13740 Billings, MT	Total	341	77,584	8,066	9,315	10.4	12
Billings, MT	Private	317	72,290	5,703	6,333	7.9	8.8
Billings, MT	Public	24	5,295	2,364	2,981	44.6	56.3

13780	Binghamton, NY	Total	101	103,642	27,959	28,909	27	27.9
	Binghamton, NY	Private	70	74,601	6,271	7,221	8.4	9.7
	Binghamton, NY	Public	31	29,041	21,688	21,688	74.7	74.7
13820	Birmingham-Hoover, AL	Total	536	519,698	78,061	85,658	15	16.5
	Birmingham-Hoover, AL	Private	455	442,344	49,577	55,335	11.2	12.5
	Birmingham-Hoover, AL	Public	81	77,354	28,484	30,323	36.8	39.2
14020	Bloomington, IN	Total	127	147,342	26,205	27,201	17.8	18.5
	Bloomington, IN	Private	100	118,936	17,739	17,739	14.9	14.9
	Bloomington, IN	Public	27	28,406	8,466	9,462	29.8	33.3
14060	Bloomington-Normal IL	Total	72	80,332	5,997	5,997	7.5	7.5
	Bloomington-Normal IL	Private	64	70,709	2,177	2,177	3.1	3.1
	Bloomington-Normal IL	Public	8	9,623	3,820	3,820	39.7	39.7
14260	Boise City-Nampa, ID	Total	812	271,138	12,874	17,364	4.7	6.4
	Boise City-Nampa, ID	Private	671	224,675	5,232	6,671	2.3	3
	Boise City-Nampa, ID	Public	141	46,463	7,643	10,693	16.4	23
71650	Boston-Cambridge-Quincy, MA-NH	Total	2,392	1,808,901	229,623	247,728	12.7	13.7
	Boston-Cambridge-Quincy, MA-NH	Private	2,074	1,564,897	76,546	87,899	4.9	5.6
	Boston-Cambridge-Quincy, MA-NH	Public	318	244,005	153,077	159,828	62.7	65.5
14500	Boulder, CO	Total	257	167,781	8,412	11,502	5	6.9
	Boulder, CO	Private	214	139,676	3,213	4,818	2.3	3.4
	Boulder, CO	Public	43	28,105	5,199	6,685	18.5	23.8
14540	Bowling Green, KY	Total	57	44,431	2,426	3,817	5.5	8.6
	Bowling Green, KY	Private	46	35,920	1,698	3,089	4.7	8.6
	Bowling Green, KY	Public	11	8,512	728	728	8.6	8.6
14740	Bremerton-Silverdale, WA	Total	67	63,224	17,120	18,011	27.1	28.5
	Bremerton-Silverdale, WA	Private	43	40,688	4,566	4,566	11.2	11.2
	Bremerton-Silverdale, WA	Public	24	22,537	12,554	13,445	55.7	59.7
71950	Bridgeport-Stamford-Norwalk, CT	Total	698	294,871	38,051	39,712	12.9	13.5
	Bridgeport-Stamford-Norwalk, CT	Private	610	258,179	11,936	12,369	4.6	4.8
	Bridgeport-Stamford-Norwalk, CT	Public	88	36,692	26,115	27,343	71.2	74.5
15180	Brownsville-Harlingen, TX	Total	85	99,092	1,072	4,726	1.1	4.8
	Brownsville-Harlingen, TX	Private	63	74,152	0	2,574	0	3.5
	Brownsville-Harlingen, TX	Public	22	24,940	1,072	2,153	4.3	8.6
15380	Buffalo-Niagara Falls, NY	Total	430	489,178	122,252	124,348	25	25.4
	Buffalo-Niagara Falls, NY	Private	366	418,515	68,032	68,032	16.3	16.3
	Buffalo-Niagara Falls, NY	Public	64	70,663	54,219	56,315	76.7	79.7
72400	Burlington-South Burlington, VT	Total	728	87,009	8,630	10,151	9.9	11.7

Burlington-South Burlington, VT	Private	617	74,339	3,247	3,919	4.4	5.3
Burlington-South Burlington, VT	Public	111	12,670	5,383	6,232	42.5	49.2
15940 Canton-Massillon, OH	Total	177	176,336	24,233	30,095	13.7	17.1
Canton-Massillon, OH	Private	152	150,763	14,289	15,231	9.5	10.1
Canton-Massillon, OH	Public	25	25,573	9,945	14,864	38.9	58.1
15980 Cape Coral-Fort Myers, FL	Total	221	282,518	12,320	13,693	4.4	4.8
Cape Coral-Fort Myers, FL	Private	196	252,708	0	0	0	0
Cape Coral-Fort Myers, FL	Public	25	29,810	12,320	13,693	41.3	45.9
16300 Cedar Rapids, IA	Total	191	88,872	10,656	11,921	12	13.4
Cedar Rapids, IA	Private	167	78,030	5,916	5,916	7.6	7.6
Cedar Rapids, IA	Public	24	10,842	4,740	6,005	43.7	55.4
16580 Champaign-Urbana, IL	Total	145	154,268	22,629	23,739	14.7	15.4
Champaign-Urbana, IL	Private	96	100,726	6,118	6,118	6.1	6.1
Champaign-Urbana, IL	Public	49	53,542	16,512	17,621	30.8	32.9
16620 Charleston, WV	Total	399	142,297	6,768	8,367	4.8	5.9
Charleston, WV	Private	326	116,321	4,589	4,964	3.9	4.3
Charleston, WV	Public	73	25,976	2,178	3,403	8.4	13.1
16700 Charleston-North Charleston, SC	Total	337	303,532	2,373	2,373	0.8	0.8
Charleston-North Charleston, SC	Private	276	250,022	797	797	0.3	0.3
Charleston-North Charleston, SC	Public	61	53,510	1,576	1,576	2.9	2.9
16740 Charlotte-Gastonia-Concord, NC-SC	Total	747	869,034	20,163	22,457	2.3	2.6
Charlotte-Gastonia-Concord, NC-SC	Private	679	791,463	16,811	17,804	2.1	2.2
Charlotte-Gastonia-Concord, NC-SC	Public	68	77,571	3,351	4,652	4.3	6
16860 Chattanooga, TN-GA	Total	197	215,699	17,379	17,379	8.1	8.1
Chattanooga, TN-GA	Private	164	180,824	5,131	5,131	2.8	2.8
Chattanooga, TN-GA	Public	33	34,875	12,249	12,249	35.1	35.1
16980 Chicago-Naperville-Joliet, IN-IN-WI	Total	3,849	4,036,097	618,593	655,702	15.3	16.2
Chicago-Naperville-Joliet, IN-IN-WI	Private	3,377	3,545,269	342,039	366,735	9.6	10.3
Chicago-Naperville-Joliet, IN-IN-WI	Public	472	490,828	276,554	288,967	56.3	58.9
17020 Chico, CA	Total	68	73,608	6,278	8,637	8.5	11.7
Chico, CA	Private	53	57,278	1,295	1,295	2.3	2.3
Chico, CA	Public	15	16,330	4,983	7,342	30.5	45
17140 Cincinnati-Middletown, OH-KY-IN	Total	937	934,108	93,928	115,522	10.1	12.4
Cincinnati-Middletown, OH-KY-IN	Private	850	851,466	63,849	80,763	7.5	9.5
Cincinnati-Middletown, OH-KY-IN	Public	87	82,643	30,079	34,759	36.4	42.1
17460 Cleveland-Elyria-Mentor, OH	Total	827	893,982	111,418	118,142	12.5	13.2
Cleveland-Elyria-Mentor, OH	Private	733	793,785	56,576	59,093	7.1	7.4

Cleveland-Elvira-Mentor, OH	Public	94	100,197	54,842	59,049	54.7	58.9
17660 Coeur d'Alene, ID	Total	184	61,419	5,404	5,404	8.8	8.8
Coeur d'Alene, ID	Private	149	49,903	2,031	2,031	4.1	4.1
Coeur d'Alene, ID	Public	35	11,516	3,373	3,373	29.3	29.3
17820 Colorado Springs, CO	Total	377	242,838	65,436	68,119	26.9	28.1
Colorado Springs, CO	Private	305	196,612	49,035	49,661	24.9	25.3
Colorado Springs, CO	Public	72	46,226	16,402	18,457	35.5	39.9
17860 Columbia, MO	Total	67	69,073	3,436	6,015	5	8.7
Columbia, MO	Private	45	47,275	3,436	3,436	7.3	7.3
Columbia, MO	Public	22	21,799	0	2,579	0	11.8
17900 Columbia, SC	Total	397	367,056	4,148	7,427	1.1	2
Columbia, SC	Private	334	311,943	818	818	0.3	0.3
Columbia, SC	Public	63	55,113	3,330	6,610	6	12
17980 Columbus, GA-AL	Total	84	93,612	3,129	5,166	3.3	5.5
Columbus, GA-AL	Private	70	77,799	987	987	1.3	1.3
Columbus, GA-AL	Public	14	15,813	2,142	4,178	13.5	26.4
18140 Columbus, OH	Total	686	792,712	69,845	81,228	8.8	10.2
Columbus, OH	Private	569	659,130	20,749	26,545	3.1	4
Columbus, OH	Public	117	133,582	49,096	54,683	36.8	40.9
18580 Corpus Christi, TX	Total	154	179,505	12,751	21,120	7.1	11.8
Corpus Christi, TX	Private	126	147,723	8,230	12,091	5.6	8.2
Corpus Christi, TX	Public	28	31,782	4,521	9,029	14.2	28.4
19100 Dallas-Fort Worth-Arlington, TX	Total	2,586	3,128,909	166,135	205,092	5.3	6.6
Dallas-Fort Worth-Arlington, TX	Private	2,288	2,774,443	88,540	118,288	3.2	4.3
Dallas-Fort Worth-Arlington, TX	Public	298	354,466	77,595	86,804	21.9	24.5
72850 Danbury, CT	Total	119	51,547	5,660	5,660	11	11
Danbury, CT	Private	107	45,127	1,129	1,129	2.5	2.5
Danbury, CT	Public	12	6,420	4,531	4,531	70.6	70.6
19340 Davenport-Moline-Rock Island, IA-IL	Total	268	174,426	23,315	24,170	13.4	13.9
Davenport-Moline-Rock Island, IA-IL	Private	243	159,861	17,483	18,338	10.9	11.5
Davenport-Moline-Rock Island, IA-IL	Public	25	14,565	5,832	5,832	40	40
19380 Dayton, OH	Total	318	348,414	42,889	49,282	12.3	14.1
Dayton, OH	Private	266	292,003	19,555	21,609	6.7	7.4
Dayton, OH	Public	52	56,411	23,335	27,672	41.4	49.1
19460 Decatur, AI	Total	58	64,276	4,784	4,784	7.4	7.4
Decatur, AI	Private	50	55,547	2,898	2,898	5.2	5.2
Decatur, AI	Public	8	8,729	1,887	1,887	21.6	21.6

19500 Decatur, IL	Total	96	101,875	20,052	20,052	19.7	19.7
Decatur, IL	Private	84	89,391	10,904	10,904	12.2	12.2
Decatur, IL	Public	12	12,483	9,148	9,148	73.3	73.3
19660 Deltona-Daytona Beach-Ormond Beach, FL	Total	169	212,482	11,722	14,061	5.5	6.6
Deltona-Daytona Beach-Ormond Beach, FL	Private	159	199,744	8,873	8,873	4.4	4.4
Deltona-Daytona Beach-Ormond Beach, FL	Public	10	12,738	2,849	5,189	22.4	40.7
19740 Denver-Aurora, CO	Total	1,939	1,293,276	110,644	128,145	8.6	9.9
Denver-Aurora, CO	Private	1,645	1,093,526	67,314	73,598	6.2	6.7
Denver-Aurora, CO	Public	294	199,750	43,330	54,548	21.7	27.3
19780 Des Moines, IA	Total	679	319,104	30,054	35,891	9.4	11.2
Des Moines, IA	Private	594	279,689	16,546	19,113	5.9	6.8
Des Moines, IA	Public	85	39,415	13,507	16,778	34.3	42.6
19820 Detroit-Warren-Livonia, MI	Total	1,594	1,757,055	261,053	277,673	14.9	15.8
Detroit-Warren-Livonia, MI	Private	1,426	1,576,349	161,664	171,925	10.3	10.9
Detroit-Warren-Livonia, MI	Public	168	180,706	99,389	105,747	55	58.5
20100 Dover, DE	Total	441	68,660	8,425	9,066	12.3	13.2
Dover, DE	Private	309	48,835	2,185	2,411	4.5	4.9
Dover, DE	Public	132	19,825	6,240	6,655	31.5	33.6
20260 Duluth, MN-WI	Total	150	84,397	23,276	23,276	27.6	27.6
Duluth, MN-WI	Private	128	72,195	12,778	12,778	17.7	17.7
Duluth, MN-WI	Public	22	12,202	10,497	10,497	86	86
20500 Durham, NC	Total	229	274,683	3,516	3,516	1.3	1.3
Durham, NC	Private	180	214,679	0	0	0	0
Durham, NC	Public	49	60,004	3,516	3,516	5.9	5.9
20740 Eau Claire, WI	Total	104	74,763	6,462	6,462	8.6	8.6
Eau Claire, WI	Private	96	69,345	4,824	4,824	7	7
Eau Claire, WI	Public	8	5,418	1,638	1,638	30.2	30.2
20940 El Centro, CA	Total	53	55,688	13,463	14,577	24.2	26.2
El Centro, CA	Private	36	37,796	2,127	2,127	5.6	5.6
El Centro, CA	Public	17	17,892	11,336	12,450	63.4	69.6
21340 El Paso, TX	Total	265	310,177	22,621	41,573	7.3	13.4
El Paso, TX	Private	195	231,300	5,139	9,715	2.2	4.2
El Paso, TX	Public	70	78,876	17,482	31,857	22.2	40.4
21500 Erie, PA	Total	104	113,687	21,742	21,742	19.1	19.1
Erie, PA	Private	95	103,809	15,032	15,032	14.5	14.5
Erie, PA	Public	9	9,878	6,709	6,709	67.9	67.9
21660 Eugene-Springfield, OR	Total	186	126,275	23,036	24,148	18.2	19.1

Eugene-Springfield, OR	Private	141	95,195	5,967	5,967	6.3	6.3
Eugene-Springfield, OR	Public	45	31,080	17,070	18,181	54.9	58.5
21780 Evansville, IN-KY	Total	110	122,959	10,138	11,089	8.2	9
Evansville, IN-KY	Private	102	115,281	8,058	8,058	7	7
Evansville, IN-KY	Public	8	7,678	2,081	3,032	27.1	39.5
22020 Fargo, ND-MN	Total	708	98,239	6,051	7,415	6.2	7.5
Fargo, ND-MN	Private	612	85,258	2,516	3,037	3	3.6
Fargo, ND-MN	Public	96	12,981	3,535	4,378	27.2	33.7
22140 Farmington, NM	Total	74	32,231	1,529	2,010	4.7	6.2
Farmington, NM	Private	60	26,565	991	991	3.7	3.7
Farmington, NM	Public	14	5,666	538	1,019	9.5	18
22180 Fayetteville, NC	Total	90	116,701	2,670	3,610	2.3	3.1
Fayetteville, NC	Private	66	87,681	2,670	3,610	3	4.1
Fayetteville, NC	Public	24	29,019	0	0	0	0
22220 Fayetteville-Springdale-Rogers, AR-MO	Total	385	230,438	7,309	8,377	3.2	3.6
Fayetteville-Springdale-Rogers, AR-MO	Private	351	209,255	2,217	2,711	1.1	1.3
Fayetteville-Springdale-Rogers, AR-MO	Public	34	21,182	5,092	5,666	24	26.7
22420 Flint, MI	Total	148	160,153	23,185	26,486	14.5	16.5
Flint, MI	Private	129	139,602	10,961	14,262	7.9	10.2
Flint, MI	Public	19	20,551	12,224	12,224	59.5	59.5
22460 Florence, AL	Total	89	97,009	11,141	11,141	11.5	11.5
Florence, AL	Private	67	72,790	3,955	3,955	5.4	5.4
Florence, AL	Public	22	24,219	7,186	7,186	29.7	29.7
22660 Fort Collins-Loveland, CO	Total	239	157,427	4,047	5,219	2.6	3.3
Fort Collins-Loveland, CO	Private	201	132,998	1,501	1,501	1.1	1.1
Fort Collins-Loveland, CO	Public	38	24,429	2,546	3,718	10.4	15.2
22900 Fort Smith, AR-OK	Total	148	82,393	5,507	6,076	6.7	7.4
Fort Smith, AR-OK	Private	133	73,676	2,793	3,362	3.8	4.6
Fort Smith, AR-OK	Public	15	8,717	2,714	2,714	31.1	31.1
23020 Fort Walton Beach-Crestview-Destin, FL	Total	84	109,010	1,099	2,952	1	2.7
Fort Walton Beach-Crestview-Destin, FL	Private	76	100,074	0	1,853	0	1.9
Fort Walton Beach-Crestview-Destin, FL	Public	8	8,936	1,099	1,099	12.3	12.3
23060 Fort Wayne, IN	Total	193	211,690	23,386	27,974	11	13.2
Fort Wayne, IN	Private	171	188,357	13,887	18,476	7.4	9.8
Fort Wayne, IN	Public	22	23,333	9,498	9,498	40.7	40.7
23420 Fresno, CA	Total	323	350,305	63,469	68,556	18.1	19.6
Fresno, CA	Private	239	262,624	12,763	14,647	4.9	5.6

Fresno, CA	Public	84	87,680	50,706	53,909	57.8	61.5
23540 Gainesville, FL	Total	91	112,859	7,912	9,147	7	8.1
Gainesville, FL	Private	62	77,086	1,466	1,466	1.9	1.9
Gainesville, FL	Public	29	35,773	6,445	7,680	18	21.5
24340 Grand Rapids-Wyoming, MI	Total	425	453,465	40,840	45,801	9	10.1
Grand Rapids-Wyoming, MI	Private	384	411,663	21,104	26,065	5.1	6.3
Grand Rapids-Wyoming, MI	Public	41	41,802	19,736	19,736	47.2	47.2
24540 Greeley, CO	Total	169	112,675	7,569	8,616	6.7	7.6
Greeley, CO	Private	138	90,852	6,510	7,557	7.2	8.3
Greeley, CO	Public	31	21,822	1,059	1,059	4.9	4.9
24580 Green Bay, WI	Total	195	154,823	11,407	12,602	7.4	8.1
Green Bay, WI	Private	165	132,857	5,228	6,423	3.9	4.8
Green Bay, WI	Public	30	21,966	6,179	6,179	28.1	28.1
24660 Greensboro-High Point, NC	Total	311	368,921	8,055	11,520	2.2	3.1
Greensboro-High Point, NC	Private	260	304,964	2,460	3,745	0.8	1.2
Greensboro-High Point, NC	Public	51	63,957	5,595	7,775	8.7	12.2
24860 Greenville, SC	Total	278	264,204	5,175	6,597	2	2.5
Greenville, SC	Private	244	230,970	3,059	3,850	1.3	1.7
Greenville, SC	Public	34	33,234	2,117	2,747	6.4	8.3
25060 Gulfport-Biloxi, MS	Total	63	45,289	1,544	1,544	3.4	3.4
Gulfport-Biloxi, MS	Private	55	39,715	1,544	1,544	3.9	3.9
Gulfport-Biloxi, MS	Public	8	5,574	0	0	0	0
25180 Hagerstown-Martinsburg, MD-WV	Total	126	59,589	11,238	11,409	18.9	19.1
Hagerstown-Martinsburg, MD-WV	Private	97	46,775	4,040	4,040	8.6	8.6
Hagerstown-Martinsburg, MD-WV	Public	29	12,813	7,198	7,369	56.2	57.5
25420 Harrisburg-Carlisle, PA	Total	249	269,265	34,546	34,546	12.8	12.8
Harrisburg-Carlisle, PA	Private	204	221,166	12,221	12,221	5.5	5.5
Harrisburg-Carlisle, PA	Public	45	48,098	22,324	22,324	46.4	46.4
25500 Harrisonburg, VA	Total	86	77,783	2,557	2,557	3.3	3.3
Harrisonburg, VA	Private	71	65,127	1,823	1,823	2.8	2.8
Harrisonburg, VA	Public	15	12,657	735	735	5.8	5.8
73450 Hartford-West Hartford-East Hartford, CT	Total	966	406,475	55,239	58,278	13.6	14.3
Hartford-West Hartford-East Hartford, CT	Private	824	349,431	21,203	23,454	6.1	6.7
Hartford-West Hartford-East Hartford, CT	Public	142	57,045	34,035	34,824	59.7	61
25860 Hickory-Morgantown-Lenoir, NC	Total	106	128,100	4,305	6,397	3.4	5
Hickory-Morgantown-Lenoir, NC	Private	87	103,360	1,036	2,074	1	2
Hickory-Morgantown-Lenoir, NC	Public	19	24,740	3,269	4,324	13.2	17.5

26100	Holland-Grand Haven, MI	Total	92	94,672	11,785	11,785	12.4	12.4
	Holland-Grand Haven, MI	Private	86	88,532	7,454	7,454	8.4	8.4
	Holland-Grand Haven, MI	Public	6	6,140	4,331	4,331	70.5	70.5
26180	Honolulu, HI	Total	1,547	343,319	68,120	73,096	19.8	21.3
	Honolulu, HI	Private	1,186	265,307	34,520	35,802	13	13.5
	Honolulu, HI	Public	361	78,012	33,600	37,294	43.1	47.8
26420	Houston-Baytown-Sugar Land, TX	Total	2,215	2,924,006	156,508	194,303	5.4	6.6
	Houston-Baytown-Sugar Land, TX	Private	1,954	2,578,041	81,471	108,940	3.2	4.2
	Houston-Baytown-Sugar Land, TX	Public	261	345,965	75,037	85,364	21.7	24.7
26580	Huntington-Ashland, WV-KY-OH	Total	205	62,103	6,542	7,291	10.5	11.7
	Huntington-Ashland, WV-KY-OH	Private	148	45,755	3,395	3,395	7.4	7.4
	Huntington-Ashland, WV-KY-OH	Public	57	16,348	3,146	3,896	19.2	23.8
26620	Huntsville, AL	Total	242	215,212	20,451	27,782	9.5	12.9
	Huntsville, AL	Private	184	167,856	10,137	14,029	6	8.4
	Huntsville, AL	Public	58	47,356	10,314	13,754	21.8	29
26900	Indianapolis, IN	Total	723	793,800	50,432	60,461	6.4	7.6
	Indianapolis, IN	Private	637	701,240	34,583	43,367	4.9	6.2
	Indianapolis, IN	Public	86	92,560	15,849	17,095	17.1	18.5
26980	Iowa City, IA	Total	194	97,672	12,532	20,227	12.8	20.7
	Iowa City, IA	Private	109	54,274	3,376	3,676	6.2	6.8
	Iowa City, IA	Public	85	43,398	9,156	16,551	21.1	38.1
27100	Jackson, MI	Total	98	100,939	21,597	27,686	21.4	27.4
	Jackson, MI	Private	79	81,182	12,562	15,446	15.5	19
	Jackson, MI	Public	19	19,757	9,035	12,240	45.7	62
27140	Jackson, MS	Total	360	222,827	4,183	4,601	1.9	2.1
	Jackson, MS	Private	271	166,134	2,603	2,603	1.6	1.6
	Jackson, MS	Public	89	56,693	1,580	1,998	2.8	3.5
27260	Jacksonville, FL	Total	541	684,610	62,956	71,427	9.2	10.4
	Jacksonville, FL	Private	469	596,482	30,734	34,482	5.2	5.8
	Jacksonville, FL	Public	72	88,128	32,221	36,945	36.6	41.9
27340	Jacksonville, NC	Total	77	88,982	3,923	10,228	4.4	11.5
	Jacksonville, NC	Private	49	57,725	1,633	2,775	2.8	4.8
	Jacksonville, NC	Public	28	31,257	2,290	7,453	7.3	23.8
27500	Janesville, WI	Total	96	80,754	9,629	9,629	11.9	11.9
	Janesville, WI	Private	84	70,481	5,848	5,848	8.3	8.3
	Janesville, WI	Public	12	10,274	3,781	3,781	36.8	36.8
27740	Johnson City, TN	Total	70	67,498	0	1,384	0	2.1

Johnson City, TN	Private	56	54,080	0	0	0	0
Johnson City, TN	Public	14	13,418	0	1,384	0	10.3
27780 Johnstown, PA	Total	68	71,680	15,592	15,592	21.8	21.8
Johnstown, PA	Private	52	55,234	5,462	5,462	9.9	9.9
Johnstown, PA	Public	16	16,446	10,130	10,130	61.6	61.6
27900 Joplin, MO	Total	79	75,496	1,601	1,601	2.1	2.1
Joplin, MO	Private	71	68,403	1,601	1,601	2.3	2.3
Joplin, MO	Public	8	7,092	0	0	0	0
28020 Kalamazoo-Portage, MI	Total	134	137,167	23,615	26,440	17.2	19.3
Kalamazoo-Portage, MI	Private	114	118,032	8,775	10,654	7.4	9
Kalamazoo-Portage, MI	Public	20	19,135	14,840	15,785	77.6	82.5
28100 Kankakee-Bradley, IL	Total	67	72,076	13,914	14,960	19.3	20.8
Kankakee-Bradley, IL	Private	55	59,588	5,801	5,801	9.7	9.7
Kankakee-Bradley, IL	Public	12	12,488	8,113	9,159	65	73.3
28140 Kansas City, MO-KS	Total	1,279	908,107	73,473	84,821	8.1	9.3
Kansas City, MO-KS	Private	1,105	784,915	44,702	48,954	5.7	6.2
Kansas City, MO-KS	Public	174	123,192	28,771	35,867	23.4	29.1
28660 Killien-Temple-Fort Hood, TX	Total	103	118,700	7,586	7,586	6.4	6.4
Killien-Temple-Fort Hood, TX	Private	81	93,983	3,448	3,448	3.7	3.7
Killien-Temple-Fort Hood, TX	Public	22	24,717	4,138	4,138	16.7	16.7
28700 Kingsport-Bristol, TN-VA	Total	58	60,946	0	0	0	0
Kingsport-Bristol, TN-VA	Private	46	50,699	0	0	0	0
Kingsport-Bristol, TN-VA	Public	12	10,247	0	0	0	0
28740 Kingston, NY	Total	62	73,828	15,494	17,861	21	24.2
Kingston, NY	Private	46	54,996	968	2,290	1.8	4.2
Kingston, NY	Public	16	18,831	14,526	15,571	77.1	82.7
28940 Knoxville, TN	Total	277	281,850	11,610	12,910	4.1	4.6
Knoxville, TN	Private	227	232,031	2,144	3,443	0.9	1.5
Knoxville, TN	Public	50	49,819	9,467	9,467	19	19
29100 La Crosse, WI	Total	153	113,414	11,363	12,032	10	10.6
La Crosse, WI	Private	123	92,489	5,380	5,380	5.8	5.8
La Crosse, WI	Public	30	20,925	5,983	6,652	28.6	31.8
29180 Lafayette, LA	Total	236	222,110	8,025	8,025	3.6	3.6
Lafayette, LA	Private	196	188,204	3,634	3,634	1.9	1.9
Lafayette, LA	Public	40	33,906	4,391	4,391	13	13
29340 Lake Charles, LA	Total	94	88,291	11,103	13,574	12.6	15.4
Lake Charles, LA	Private	83	78,210	8,975	8,975	11.5	11.5

Lake Charles, LA	Public	11	10,081	2,128	4,599	21.1	45.6
29460 Lakeland-Winter Haven, FL	Total	160	201,526	9,567	12,083	4.7	6
Lakeland-Winter Haven, FL	Private	138	172,886	3,448	4,411	2	2.6
Lakeland-Winter Haven, FL	Public	22	28,640	6,119	7,672	21.4	26.8
29540 Lancaster, PA	Total	203	220,889	19,462	22,628	8.8	10.2
Lancaster, PA	Private	187	202,807	11,177	14,344	5.5	7.1
Lancaster, PA	Public	16	18,082	8,284	8,284	45.8	45.8
29620 Lansing-East Lansing, MI	Total	172	181,920	34,408	37,528	18.9	20.6
Lansing-East Lansing, MI	Private	144	153,831	23,597	25,875	15.3	16.8
Lansing-East Lansing, MI	Public	28	28,089	10,811	11,652	38.5	41.5
29700 Laredo, TX	Total	103	118,154	5,627	5,627	4.8	4.8
Laredo, TX	Private	78	89,332	1,925	1,925	2.2	2.2
Laredo, TX	Public	25	28,821	3,702	3,702	12.8	12.8
29740 Las Cruces, NM	Total	160	79,893	4,318	6,479	5.4	8.1
Las Cruces, NM	Private	113	55,895	2,255	3,565	4	6.4
Las Cruces, NM	Public	47	23,998	2,063	2,914	8.6	12.1
29820 Las Vegas-Paradise, NM	Total	1,643	840,136	145,557	163,908	17.3	19.5
Las Vegas-Paradise, NM	Private	1,450	744,120	113,386	122,817	15.2	16.5
Las Vegas-Paradise, NM	Public	193	96,016	32,171	41,092	33.5	42.8
29940 Lawrence, KS	Total	151	76,287	7,173	8,100	9.4	10.6
Lawrence, KS	Private	108	54,743	4,580	4,580	8.4	8.4
Lawrence, KS	Public	43	21,544	2,592	3,520	12	16.3
30020 Lawton, OK	Total	68	55,207	0	2,125	0	3.8
Lawton, OK	Private	56	46,444	0	636	0	1.4
Lawton, OK	Public	12	8,763	0	1,489	0	17
74500 Leominster-Fitchburg-Gardner, MA	Total	58	64,772	13,521	13,521	20.9	20.9
Leominster-Fitchburg-Gardner, MA	Private	45	51,161	7,682	7,682	15	15
Leominster-Fitchburg-Gardner, MA	Public	13	13,612	5,839	5,839	42.9	42.9
30460 Lexington-Fayette, KY	Total	306	241,395	11,366	14,505	4.7	6
Lexington-Fayette, KY	Private	250	197,262	8,289	9,082	4.2	4.6
Lexington-Fayette, KY	Public	56	44,133	3,076	5,423	7	12.3
30780 Little Rock-North Little Rock, AR	Total	520	304,604	17,243	19,062	5.7	6.3
Little Rock-North Little Rock, AR	Private	432	254,026	8,422	10,241	3.3	4
Little Rock-North Little Rock, AR	Public	88	50,578	8,821	8,821	17.4	17.4
30980 Longview, TX	Total	95	110,931	2,904	5,026	2.6	4.5
Longview, TX	Private	86	100,788	1,634	3,756	1.6	3.7
Longview, TX	Public	9	10,142	1,270	1,270	12.5	12.5

31100 Los Angeles-Long Beach-Santa Ana, CA	Total	4,031	4,237,464	581,604	627,214	13.7	14.8
Los Angeles-Long Beach-Santa Ana, CA	Private	3,520	3,704,902	293,889	327,631	7.9	8.8
Los Angeles-Long Beach-Santa Ana, CA	Public	511	532,562	287,715	299,583	54	56.3
31140 Louisville, KY-IN	Total	627	529,298	83,023	94,089	15.7	17.8
Louisville, KY-IN	Private	536	453,478	47,201	56,062	10.4	12.4
Louisville, KY-IN	Public	91	75,820	35,821	38,026	47.2	50.2
31180 Lubbock, TX	Total	74	87,515	13,599	20,761	15.5	23.7
Lubbock, TX	Private	60	70,860	7,211	13,293	10.2	18.8
Lubbock, TX	Public	14	16,654	6,388	7,468	38.4	44.8
31340 Lynchburg, VA	Total	76	73,555	4,521	4,521	6.1	6.1
Lynchburg, VA	Private	66	63,592	1,807	1,807	2.8	2.8
Lynchburg, VA	Public	10	9,963	2,713	2,713	27.2	27.2
31420 Macon,, GA	Total	53	62,016	0	0	0	0
Macon,, GA	Private	46	54,513	0	0	0	0
Macon,, GA	Public	7	7,504	0	0	0	0
31460 Madera, CA	Total	67	68,508	14,097	14,097	20.6	20.6
Madera, CA	Private	48	49,807	4,755	4,755	9.5	9.5
Madera, CA	Public	19	18,701	9,342	9,342	50	50
31540 Madison, WI	Total	390	339,738	40,116	45,612	11.8	13.4
Madison, WI	Private	291	256,651	15,108	17,584	5.9	6.9
Madison, WI	Public	99	83,087	25,008	28,028	30.1	33.7
32580 McAllen-Edinburg-Pharr, TX	Total	197	231,885	948	2,064	0.4	0.9
McAllen-Edinburg-Pharr, TX	Private	167	197,897	0	0	0	0
McAllen-Edinburg-Pharr, TX	Public	30	33,988	948	2,064	2.8	6.1
32780 Medford, OR	Total	115	77,032	10,410	10,410	13.5	13.5
Medford, OR	Private	102	68,587	6,431	6,431	9.4	9.4
Medford, OR	Public	13	8,445	3,979	3,979	47.1	47.1
32820 Memphis, TN-MS-AR	Total	561	557,626	40,509	44,257	7.3	7.9
Memphis, TN-MS-AR	Private	473	468,521	13,236	13,919	2.8	3
Memphis, TN-MS-AR	Public	88	89,105	27,273	30,338	30.6	34
32900 Merced, CA	Total	84	89,640	21,345	24,044	23.8	26.8
Merced, CA	Private	66	70,793	10,377	13,076	14.7	18.5
Merced, CA	Public	18	18,847	10,968	10,968	58.2	58.2
33100 Miami-Fort Lauderdale-Miami Beach, FL	Total	1,975	2,467,352	146,430	169,220	5.9	6.9
Miami-Fort Lauderdale-Miami Beach, FL	Private	1,715	2,146,184	40,766	53,803	1.9	2.5
Miami-Fort Lauderdale-Miami Beach, FL	Public	260	321,169	105,664	115,417	32.9	35.9
33140 Michigan City-La Porte, IN	Total	70	79,579	8,494	9,637	10.7	12.1

Michigan City-La Porte, IN	Private	63	72,246	6,375	6,375	8.8	8.8
Michigan City-La Porte, IN	Public	7	7,333	2,119	3,262	28.9	44.5
Midland, TX	Total	63	71,375	2,144	2,144	3	3
Midland, TX	Private	52	59,449	0	0	0	0
Midland, TX	Public	11	11,927	2,144	2,144	18	18
33340 Milwaukee-Waukesha-West Allis, WI	Total	874	670,510	59,511	62,477	8.9	9.3
Milwaukee-Waukesha-West Allis, WI	Private	775	594,051	36,460	38,810	6.1	6.5
Milwaukee-Waukesha-West Allis, WI	Public	99	76,459	23,051	23,667	30.1	31
33460 Minneapolis-St Paul-Bloomington, MN-WI	Total	2,529	1,643,603	223,079	233,663	13.6	14.2
Minneapolis-St Paul-Bloomington, MN-WI	Private	2,198	1,430,730	103,905	111,658	7.3	7.8
Minneapolis-St Paul-Bloomington, MN-WI	Public	331	212,873	119,175	122,005	56	57.3
33660 Mobile, AL	Total	138	129,979	10,845	12,016	8.3	9.2
Mobile, AL	Private	122	115,617	3,274	3,274	2.8	2.8
Mobile, AL	Public	16	14,363	7,571	8,742	52.7	60.9
33700 Modesto, CA	Total	208	226,492	61,381	78,164	27.1	34.5
Modesto, CA	Private	184	200,657	43,118	58,866	21.5	29.3
Modesto, CA	Public	24	25,835	18,263	19,298	70.7	74.7
33740 Monroe, LA	Total	161	159,268	7,648	10,471	4.8	6.6
Monroe, LA	Private	137	135,181	3,008	5,830	2.2	4.3
Monroe, LA	Public	24	24,087	4,640	4,640	19.3	19.3
33780 Monroe, MI	Total	121	134,026	24,906	24,906	18.6	18.6
Monroe, MI	Private	117	130,316	22,933	22,933	17.6	17.6
Monroe, MI	Public	4	3,710	1,974	1,974	53.2	53.2
33860 Montgomery, AL	Total	153	149,259	14,374	14,374	9.6	9.6
Montgomery, AL	Private	120	119,388	2,500	2,500	2.1	2.1
Montgomery, AL	Public	33	29,870	11,874	11,874	39.8	39.8
34740 Muskegon-Norton Shores, MI	Total	82	85,329	12,543	14,457	14.7	16.9
Muskegon-Norton Shores, MI	Private	70	73,451	8,333	9,525	11.3	13
Muskegon-Norton Shores, MI	Public	12	11,878	4,210	4,932	35.4	41.5
34820 Myrtle Beach-Conway-North Myrtle Beach, SC	Total	105	95,154	0	0	0	0
Myrtle Beach-Conway-North Myrtle Beach, SC	Private	90	82,613	0	0	0	0
Myrtle Beach-Conway-North Myrtle Beach, SC	Public	15	12,542	0	0	0	0
34900 Napa, CA	Total	74	82,984	11,299	11,299	13.6	13.6
Napa, CA	Private	63	71,276	5,135	5,135	7.2	7.2
Napa, CA	Public	11	11,708	6,165	6,165	52.7	52.7
34940 Naples-Marco Island, FL	Total	84	103,723	0	0	0	0
Naples-Marco Island, FL	Private	78	96,929	0	0	0	0

Naples-Marco Island, FL	Public	6	6,794	0	0	0	0
34980 Nashville-Davidson-Murfreesboro, TN	Total	655	718,858	19,353	24,686	2.7	3.4
Nashville-Davidson-Murfreesboro, TN	Private	568	648,435	12,768	13,705	2	2.1
Nashville-Davidson-Murfreesboro, TN	Public	67	70,423	6,585	10,981	9.4	15.6
75700 New Haven, CT	Total	531	226,911	37,068	38,357	16.3	16.9
New Haven, CT	Private	458	196,777	16,914	17,483	8.6	8.9
New Haven, CT	Public	73	30,134	20,154	20,874	66.9	69.3
35380 New Orleans-Metairie-Kenner, LA	Total	524	488,716	18,844	27,406	3.9	5.6
New Orleans-Metairie-Kenner, LA	Private	463	431,477	13,465	21,029	3.1	4.9
New Orleans-Metairie-Kenner, LA	Public	61	57,239	5,378	6,377	9.4	11.1
35620 New York-Northern New Jersey-Long Island, NY-NJ-PA	Total	7,105	8,227,311	1,737,492	1,829,519	21.1	22.2
New York-Northern New Jersey-Long Island, NY-NJ-PA	Private	6,032	7,009,858	911,283	983,262	13	14
New York-Northern New Jersey-Long Island, NY-NJ-PA	Public	1,073	1,217,453	826,210	846,257	67.9	69.5
35660 Niles-Benton Harbor, MI	Total	63	61,535	3,745	3,745	6.1	6.1
Niles-Benton Harbor, MI	Private	62	60,617	2,826	2,826	4.7	4.7
Niles-Benton Harbor, MI	Public	1	918	918	918	100	100
76450 Norwich-New London, CT-RI	Total	205	86,237	12,476	13,330	14.5	15.5
Norwich-New London, CT-RI	Private	170	71,956	6,320	6,738	8.8	9.4
Norwich-New London, CT-RI	Public	35	14,281	6,156	6,592	43.1	46.2
36100 Ocala, FL	Total	88	105,932	1,374	1,374	1.3	1.3
Ocala, FL	Private	74	90,013	0	0	0	0
Ocala, FL	Public	14	15,919	1,374	1,374	8.6	8.6
36140 Ocean City, NJ	Total	22	22,489	6,524	6,524	29	29
Ocean City, NJ	Private	17	17,434	2,475	2,475	14.2	14.2
Ocean City, NJ	Public	5	5,055	4,049	4,049	80.1	80.1
36260 Ogden-Clearfield, UT	Total	516	280,564	12,744	15,776	4.5	5.6
Ogden-Clearfield, UT	Private	418	227,223	7,263	8,521	3.2	3.7
Ogden-Clearfield, UT	Public	98	53,341	5,481	7,255	10.3	13.6
36420 Oklahoma City, OK	Total	751	571,308	38,046	44,002	6.7	7.7
Oklahoma City, OK	Private	605	464,140	11,025	14,009	2.4	3
Oklahoma City, OK	Public	146	107,168	27,021	29,992	25.2	28
36500 Olympia, WA	Total	106	104,198	23,676	26,323	22.7	25.3
Olympia, WA	Private	67	68,404	6,019	6,019	8.8	8.8
Olympia, WA	Public	39	35,793	17,657	20,304	49.3	56.7
36540 Omaha-Council Bluffs, NE-IA	Total	1,287	457,686	41,531	49,512	9.1	10.8
Omaha-Council Bluffs, NE-IA	Private	1,100	391,517	17,571	20,508	4.5	5.2
Omaha-Council Bluffs, NE-IA	Public	187	66,169	23,960	29,004	36.2	43.8

36740	Orlando, FL	Total	770	1,005,846	55,232	66,613	5.5	6.6
	Orlando, FL	Private	694	909,596	36,472	45,065	4	5
	Orlando, FL	Public	76	96,249	18,760	21,548	19.5	22.4
36780	Ostikosh-Neenah, WI	Total	97	73,996	7,715	8,995	10.4	12.2
	Ostikosh-Neenah, WI	Private	88	67,474	6,832	6,832	10.1	10.1
	Ostikosh-Neenah, WI	Public	9	6,522	883	2,162	13.5	33.2
37100	Oxnard-Thousand Oaks-Ventura, CA	Total	317	339,367	74,659	78,389	22	23.1
	Oxnard-Thousand Oaks-Ventura, CA	Private	261	281,956	37,186	38,044	13.2	13.5
	Oxnard-Thousand Oaks-Ventura, CA	Public	56	57,411	37,474	40,345	65.3	70.3
37340	Palm Bay-Melbourne-Titusville, FL	Total	165	201,794	6,441	7,537	3.2	3.7
	Palm Bay-Melbourne-Titusville, FL	Private	139	170,400	0	0	0	0
	Palm Bay-Melbourne-Titusville, FL	Public	26	31,393	6,441	7,537	20.5	24
37460	Panama City-Lynn Haven, FL	Total	76	86,723	1,789	2,393	2.1	2.8
	Panama City-Lynn Haven, FL	Private	67	77,452	1,789	1,789	2.3	2.3
	Panama City-Lynn Haven, FL	Public	9	9,271	0	604	0	6.5
37860	Pensacola-Ferry Pass-Brent, FL	Total	137	170,494	13,995	15,112	8.2	8.9
	Pensacola-Ferry Pass-Brent, FL	Private	111	139,043	2,320	2,320	1.7	1.7
	Pensacola-Ferry Pass-Brent, FL	Public	26	31,451	11,675	12,792	37.1	40.7
37900	Peoria, IL	Total	161	167,338	24,675	26,661	14.7	15.9
	Peoria, IL	Private	146	152,208	15,694	17,680	10.3	11.6
	Peoria, IL	Public	15	15,130	8,981	8,981	59.4	59.4
37980	Philadelphia-Camden-Wilmington, PA-NJ-DE	Total	3,658	2,541,857	352,283	373,852	13.9	14.7
	Philadelphia-Camden-Wilmington, PA-NJ-DE	Private	3,220	2,256,688	178,843	193,377	7.9	8.6
	Philadelphia-Camden-Wilmington, PA-NJ-DE	Public	438	285,169	173,441	180,475	60.8	63.3
38060	Phoenix-Mesa-Scottsdale, AZ	Total	1,453	1,773,307	85,436	110,314	4.8	6.2
	Phoenix-Mesa-Scottsdale, AZ	Private	1,301	1,589,720	49,176	61,723	3.1	3.9
	Phoenix-Mesa-Scottsdale, AZ	Public	152	183,587	36,259	48,591	19.8	26.5
38300	Pittsburgh, PA	Total	988	1,091,588	158,142	170,593	14.5	15.6
	Pittsburgh, PA	Private	883	977,727	95,655	103,019	9.8	10.5
	Pittsburgh, PA	Public	105	113,861	62,487	67,574	54.9	59.3
38940	Port St. Lucie-Fort Pierce, FL	Total	126	157,941	12,366	17,262	7.8	10.9
	Port St. Lucie-Fort Pierce, FL	Private	110	138,174	7,445	7,445	5.4	5.4
	Port St. Lucie-Fort Pierce, FL	Public	16	19,767	4,922	9,818	24.9	49.7
76750	Portland-South Portland, ME	Total	719	150,565	14,607	17,201	9.7	11.4
	Portland-South Portland, ME	Private	617	130,222	5,131	6,055	3.9	4.6
	Portland-South Portland, ME	Public	102	20,343	9,477	11,146	46.6	54.8
38900	Portland-Vancouver-Beaverton, OR-WA	Total	1,315	966,461	151,417	164,108	15.7	17

Portland-Vancouver-Beaverton, OR-WA	Private	1,134	835,560	72,571	82,613	8.7	9.9
Portland-Vancouver-Beaverton, OR-WA	Public	181	130,900	78,846	81,495	60.2	62.3
39100 Poughkeepsie-Newburgh-Middletown, NY	Total	175	206,510	63,982	65,204	31	31.6
Poughkeepsie-Newburgh-Middletown, NY	Private	140	166,174	30,320	30,320	18.2	18.2
Poughkeepsie-Newburgh-Middletown, NY	Public	35	40,336	33,661	34,884	83.5	86.5
39140 Prescott, AZ	Total	54	61,048	1,470	2,915	2.4	4.8
Prescott, AZ	Private	43	47,746	0	0	0	0
Prescott, AZ	Public	11	13,302	1,470	2,915	11	21.9
77200 Providence-Fall River-Warwick, MA-RI	Total	2,208	452,592	68,594	71,096	15.2	15.7
Providence-Fall River-Warwick, MA-RI	Private	1,857	379,835	22,740	24,512	6	6.5
Providence-Fall River-Warwick, MA-RI	Public	351	72,758	45,854	46,585	63	64
39340 Provo-Orem, UT	Total	310	167,147	3,069	5,676	1.8	3.4
Provo-Orem, UT	Private	268	144,616	1,368	1,819	0.9	1.3
Provo-Orem, UT	Public	42	22,531	1,701	3,857	7.5	17.1
39380 Pueblo, CO	Total	124	71,601	4,781	5,369	6.7	7.5
Pueblo, CO	Private	94	53,841	2,759	2,759	5.1	5.1
Pueblo, CO	Public	30	17,761	2,022	2,610	11.4	14.7
39460 Punta Gorda, FL	Total	36	46,171	1,362	1,362	3	3
Punta Gorda, FL	Private	31	40,293	0	0	0	0
Punta Gorda, FL	Public	5	5,878	1,362	1,362	23.2	23.2
39540 Racine, WI	Total	125	88,968	17,633	19,059	19.8	21.4
Racine, WI	Private	108	77,583	11,190	11,960	14.4	15.4
Racine, WI	Public	17	11,385	6,443	7,099	56.6	62.4
39580 Raleigh-Cary, NC	Total	509	598,398	5,189	12,504	0.9	2.1
Raleigh-Cary, NC	Private	441	519,216	1,171	2,344	0.2	0.5
Raleigh-Cary, NC	Public	68	79,182	4,018	10,160	5.1	12.8
39740 Reading, PA	Total	161	177,023	9,607	10,711	5.4	6.1
Reading, PA	Private	149	164,597	5,582	5,582	3.4	3.4
Reading, PA	Public	12	12,426	4,025	5,129	32.4	41.3
39900 Reno-Sparks, NV	Total	340	158,567	11,615	13,028	7.3	8.2
Reno-Sparks, NV	Private	277	129,041	3,898	3,898	3	3
Reno-Sparks, NV	Public	63	29,526	7,717	9,131	26.1	30.9
40060 Richmond, VA	Total	641	616,994	31,912	39,304	5.2	6.4
Richmond, VA	Private	521	507,211	14,104	15,976	2.8	3.1
Richmond, VA	Public	120	109,783	17,808	23,328	16.2	21.2
40140 Riverside-San Bernardino, CA	Total	1,313	1,506,263	291,766	311,985	19.4	20.7
Riverside-San Bernardino, CA	Private	1,065	1,227,337	139,457	152,699	11.4	12.4

40220	Riverside-San Bernardino, CA Roanoke, VA	Public	248	278,925	152,309	159,286	54.6	57.1
		Total	88	85,287	5,378	6,950	6.3	8.1
40380	Roanoke, VA Rochester, NY	Private	73	70,753	2,656	4,228	3.8	6
		Public	15	14,534	2,722	2,722	18.7	18.7
77350	Rochester, NY Rochester-Dover, NH-ME	Total	411	467,722	68,927	72,100	14.7	15.4
		Private	351	400,294	24,930	25,958	6.2	6.5
40420	Rochester, NY Rockford, IL	Public	60	67,429	43,997	46,142	65.2	68.4
		Total	254	42,059	4,420	5,559	10.5	13.2
40900	Rockford, IL Rockford, IL	Private	207	34,219	1,077	1,401	3.1	4.1
		Public	47	7,840	3,344	4,158	42.7	53
40980	Sacramento--Arcade-Roseville, CA Sacramento--Arden-Arcade-Roseville, CA	Total	137	140,804	25,501	25,501	18.1	18.1
		Private	117	120,564	13,147	13,147	10.9	10.9
40980	Saginaw-Saginaw Township North, MI Saginaw-Saginaw Township North, MI	Public	20	20,240	12,354	12,354	61	61
		Total	778	825,040	171,353	191,255	20.8	23.2
41420	Saginaw-Saginaw Township North, MI Saginaw-Saginaw Township North, MI	Private	595	635,649	73,070	78,196	11.5	12.3
		Public	183	189,391	98,284	113,059	51.9	59.7
41500	Saginaw-Saginaw Township North, MI Saginaw-Saginaw Township North, MI	Total	67	67,067	13,565	14,410	20.2	21.5
		Private	62	62,460	10,101	10,945	16.2	17.5
41540	Saginaw-Saginaw Township North, MI Saginaw-Saginaw Township North, MI	Public	5	4,607	3,465	3,465	75.2	75.2
		Total	239	163,491	25,624	26,999	15.7	16.5
41620	Saginaw-Saginaw Township North, MI Saginaw-Saginaw Township North, MI	Private	197	135,636	9,711	10,419	7.2	7.7
		Public	42	27,855	15,913	16,580	57.1	59.5
41700	Salinas, CA Salinas, CA	Total	140	153,259	17,445	19,598	11.4	12.8
		Private	120	132,488	15,483	17,636	11.7	13.3
41740	Salinas, CA Salinas, CA	Public	20	20,770	1,962	1,962	9.4	9.4
		Total	165	67,793	2,237	2,790	3.3	4.1
41740	Salinas, CA Salinas, CA	Private	143	60,519	278	662	0.5	1.1
		Public	22	7,274	1,960	2,128	26.9	29.3
41740	Salinas, CA Salinas, CA	Total	961	534,058	20,960	24,160	3.9	4.5
		Private	800	443,921	8,179	9,541	1.8	2.1
41740	Salinas, CA Salinas, CA	Public	161	90,136	12,782	14,618	14.2	16.2
		Total	775	925,243	36,806	47,713	4	5.2
41740	Salinas, CA Salinas, CA	Private	653	783,597	14,754	18,210	1.9	2.3
		Public	122	141,646	22,052	29,503	15.6	20.8
41740	San Antonio, TX San Antonio, TX	Total	1,075	1,188,728	149,395	161,357	12.6	13.6
		Private	882	977,728	49,820	57,973	5.1	5.9
41740	San Antonio, TX San Antonio, TX	Public	193	210,999	99,575	103,384	47.2	49

41860	San Francisco-Oakland-Fremont, CA	Total	1,869	2,135,150	358,998	383,657	16.8	18
	San Francisco-Oakland-Fremont, CA	Private	1,614	1,851,080	202,204	216,410	10.9	11.7
	San Francisco-Oakland-Fremont, CA	Public	255	284,070	156,794	167,248	55.2	58.9
41940	San Jose-Sunnyvale-Santa Clara, CA	Total	835	939,381	147,491	151,703	15.7	16.1
	San Jose-Sunnyvale-Santa Clara, CA	Private	723	813,795	70,938	73,008	8.7	9
	San Jose-Sunnyvale-Santa Clara, CA	Public	112	125,587	76,553	78,695	61	62.7
42020	San Luis Obispo-Paso Robles, CA	Total	86	92,183	25,909	25,909	28.1	28.1
	San Luis Obispo-Paso Robles, CA	Private	65	70,242	13,946	13,946	19.9	19.9
	San Luis Obispo-Paso Robles, CA	Public	21	21,942	11,962	11,962	54.5	54.5
42060	Santa Barbara-Santa Maria-Goleta, CA	Total	122	137,956	10,932	11,934	7.9	8.7
	Santa Barbara-Santa Maria-Goleta, CA	Private	107	121,959	5,749	5,749	4.7	4.7
	Santa Barbara-Santa Maria-Goleta, CA	Public	15	15,997	5,183	6,184	32.4	38.7
42140	Santa Fe, NM	Total	83	40,432	3,213	3,808	7.9	9.4
	Santa Fe, NM	Private	60	26,907	669	669	2.5	2.5
	Santa Fe, NM	Public	23	13,525	2,544	3,139	18.8	23.2
42220	Santa Rosa-Petaluma, CA	Total	160	185,323	33,791	34,827	18.2	18.8
	Santa Rosa-Petaluma, CA	Private	127	147,086	9,586	9,586	6.5	6.5
	Santa Rosa-Petaluma, CA	Public	33	38,237	24,205	25,241	63.3	66
42100	Santa-Cruz-Watsonville, CA	Total	85	91,372	13,742	13,742	15	15
	Santa-Cruz-Watsonville, CA	Private	71	75,714	4,693	4,693	6.2	6.2
	Santa-Cruz-Watsonville, CA	Public	14	15,657	9,048	9,048	57.8	57.8
42260	Sarasota-Bradenton-Venice, FL	Total	194	239,468	21,226	25,685	8.9	10.7
	Sarasota-Bradenton-Venice, FL	Private	170	208,280	12,572	17,031	6	8.2
	Sarasota-Bradenton-Venice, FL	Public	24	31,189	8,654	8,654	27.7	27.7
42340	Savannah, GA	Total	233	249,055	14,869	19,023	6	7.6
	Savannah, GA	Private	183	196,263	7,976	12,130	4.1	6.2
	Savannah, GA	Public	50	52,792	6,893	6,893	13.1	13.1
42540	Scranton-Wilkes Barre, PA	Total	234	254,691	35,608	37,727	14	14.8
	Scranton-Wilkes Barre, PA	Private	206	225,235	19,469	19,469	8.6	8.6
	Scranton-Wilkes Barre, PA	Public	28	29,457	16,139	18,258	54.8	62
42660	Seattle-Tacoma-Bellevue, WA	Total	1,691	1,662,426	270,021	295,643	16.2	17.8
	Seattle-Tacoma-Bellevue, WA	Private	1,481	1,459,877	170,887	185,307	11.7	12.7
	Seattle-Tacoma-Bellevue, WA	Public	210	202,549	99,134	110,336	48.9	54.5
43340	Shreveport-Bossier City, LA	Total	210	176,327	11,271	13,682	6.4	7.8
	Shreveport-Bossier City, LA	Private	168	141,189	5,288	6,332	3.7	4.5
	Shreveport-Bossier City, LA	Public	42	35,138	5,983	7,350	17	20.9
43620	Sioux Falls, SD	Total	862	137,381	7,460	10,063	5.4	7.3

Sioux Falls, SD	Private	759	120,441	4,296	4,582	3.6	3.8
	Public	103	16,940	3,164	5,481	18.7	32.4
Sioux Falls, SD	Total	117	125,432	8,697	8,697	6.9	6.9
	Private	110	118,264	5,668	5,668	4.8	4.8
South Bend-Mishawaka, IN-MI	Public	7	7,167	3,029	3,029	42.3	42.3
	Total	153	140,025	0	3,358	0	2.4
Spartanburg, SC	Private	143	131,563	0	1,561	0	1.2
	Public	10	8,462	0	1,797	0	21.2
Spartanburg, SC	Total	185	185,863	30,907	34,274	16.6	18.4
	Private	160	159,831	19,253	21,643	12	13.5
Spokane, WA	Public	25	26,032	11,653	12,630	44.8	48.5
	Total	92	92,896	20,541	21,539	22.1	23.2
Spokane, WA	Private	72	72,047	9,680	9,680	13.4	13.4
	Public	20	20,848	10,862	11,860	52.1	56.9
Springfield, IL	Total	196	231,424	44,919	49,571	19.4	21.4
	Private	150	175,930	12,518	12,518	7.1	7.1
Springfield, IL	Public	46	55,494	32,401	37,053	58.4	66.8
	Total	170	161,340	5,610	5,610	3.5	3.5
Springfield, MO	Private	148	140,860	925	925	0.7	0.7
	Public	22	20,480	4,685	4,685	22.9	22.9
Springfield, MO	Total	36	40,407	4,512	5,635	11.2	13.9
	Private	32	35,451	1,262	2,385	3.6	6.7
Springfield, OH	Public	4	4,957	3,250	3,250	65.6	65.6
	Total	87	52,337	9,096	10,411	17.4	19.9
Springfield, OH	Private	77	46,032	6,257	6,976	13.6	15.2
	Public	10	6,305	2,839	3,435	45	54.5
St. Cloud, MN	Total	1,283	1,291,239	149,472	169,895	11.6	13.2
	Private	1,135	1,143,227	94,026	104,578	8.2	9.1
St. Cloud, MN	Public	148	148,012	55,446	65,317	37.5	44.1
	Total	289	316,750	66,316	68,437	20.9	21.6
St. Louis, MO-IL	Private	244	271,719	33,521	35,642	12.3	13.1
	Public	45	45,031	32,795	32,795	72.8	72.8
Stockton, CA	Total	225	251,829	53,698	55,088	21.3	21.9
	Private	182	203,448	18,076	19,466	8.9	9.6
Syracuse, NY	Public	43	48,381	35,622	35,622	73.6	73.6
	Total	116	146,570	7,946	7,946	5.4	5.4
Tallahassee, FL	Private	82	104,204	1,459	1,459	1.4	1.4

Tallahassee, FL	Public	34	42,366	6,488	6,488	15.3	15.3
45300 Tampa-St. Petersburg-Clearwater, FL	Total	1,018	1,282,050	48,425	88,432	3.8	6.9
Tampa-St. Petersburg-Clearwater, FL	Private	901	1,134,961	16,472	47,838	1.5	4.2
Tampa-St. Petersburg-Clearwater, FL	Public	117	147,089	31,953	40,595	21.7	27.6
45780 Toledo, OH	Total	259	270,036	49,940	50,903	18.5	18.9
Toledo, OH	Private	225	234,463	31,152	32,115	13.3	13.7
Toledo, OH	Public	34	35,573	18,789	18,789	52.8	52.8
45820 Topeka, KS	Total	236	119,230	19,791	22,852	16.6	19.2
Topeka, KS	Private	192	96,372	10,946	12,399	11.4	12.9
Topeka, KS	Public	44	22,858	8,845	10,453	38.7	45.7
45940 Trenton-Ewing, NJ	Total	130	142,470	24,933	26,110	17.5	18.3
Trenton-Ewing, NJ	Private	105	116,236	8,207	8,207	7.1	7.1
Trenton-Ewing, NJ	Public	25	26,234	16,726	17,903	63.8	68.2
46060 Tucson, AZ	Total	406	508,529	33,216	39,338	6.5	7.7
Tucson, AZ	Private	318	398,288	14,973	17,549	3.8	4.4
Tucson, AZ	Public	88	110,242	18,243	21,789	16.5	19.8
46140 Tulsa, OK	Total	504	388,210	22,892	25,625	5.9	6.6
Tulsa, OK	Private	442	341,381	9,495	9,942	2.8	2.9
Tulsa, OK	Public	62	46,830	13,397	15,683	28.6	33.5
46220 Tuscaloosa, AL	Total	81	94,818	14,255	15,491	15	16.3
Tuscaloosa, AL	Private	62	73,592	4,059	4,059	5.5	5.5
Tuscaloosa, AL	Public	19	21,226	10,196	11,433	48	53.9
46540 Utica-Rome, NY	Total	87	98,497	22,107	22,107	22.4	22.4
Utica-Rome, NY	Private	69	78,618	7,572	7,572	9.6	9.6
Utica-Rome, NY	Public	18	19,879	14,535	14,535	73.1	73.1
46660 Valdosta, GA	Total	52	61,218	0	0	0	0
Valdosta, GA	Private	36	43,951	0	0	0	0
Valdosta, GA	Public	16	17,268	0	0	0	0
46700 Vallejo-Fairfield, CA	Total	166	193,399	52,690	53,716	27.2	27.8
Vallejo-Fairfield, CA	Private	123	143,258	23,361	23,361	16.3	16.3
Vallejo-Fairfield, CA	Public	43	50,141	29,329	30,355	58.5	60.5
46940 Vero Beach, FL	Total	64	76,409	6,911	6,911	9	9
Vero Beach, FL	Private	57	68,510	2,526	2,526	3.7	3.7
Vero Beach, FL	Public	7	7,899	4,385	4,385	55.5	55.5
47020 Victoria, TX	Total	108	126,381	1,326	1,326	1	1
Victoria, TX	Private	96	111,576	1,326	1,326	1.2	1.2
Victoria, TX	Public	12	14,805	0	0	0	0

47220 Vineland-Miliville-Bridgeton, NJ	Total	63	71,621	17,465	18,608	24,4	26
Vineland-Miliville-Bridgeton, NJ	Private	52	58,764	10,104	11,247	17,2	19.1
Vineland-Miliville-Bridgeton, NJ	Public	11	12,858	7,361	7,361	57,2	57.2
47260 Virginia Beach-Norfolk-Newport News, VA-NC	Total	747	726,662	26,145	43,163	3,6	5.9
Virginia Beach-Norfolk-Newport News, VA-NC	Private	566	554,802	16,597	25,641	3	4.6
Virginia Beach-Norfolk-Newport News, VA-NC	Public	181	171,860	9,548	17,521	5,6	10.2
47300 Visalia-Porterville, CA	Total	111	121,955	29,017	29,017	23,8	23.8
Visalia-Porterville, CA	Private	78	85,040	6,174	6,174	7,3	7.3
Visalia-Porterville, CA	Public	33	36,915	22,843	22,843	61,9	61.9
47380 Waco, TX	Total	77	89,910	0	0	0	0
Waco, TX	Private	68	78,992	0	0	0	0
Waco, TX	Public	9	10,918	0	0	0	0
47580 Warner Robins, GA	Total	70	80,222	10,273	12,397	12,8	15.5
Warner Robins, GA	Private	48	56,107	2,292	2,292	4,1	4.1
Warner Robins, GA	Public	22	24,115	7,981	10,105	33,1	41.9
47900 Washington-Arlington-Alexandria, DC-VA-MD-WV	Total	5,820	2,874,973	258,344	309,110	9	10.8
Washington-Arlington-Alexandria, DC-VA-MD-WV	Private	4,244	2,108,910	89,199	109,249	4,2	5.2
Washington-Arlington-Alexandria, DC-VA-MD-WV	Public	1,576	766,063	169,145	199,861	22,1	26.1
78700 Waterbury, CT	Total	151	66,185	10,515	11,767	15,9	17.8
Waterbury, CT	Private	128	56,593	3,715	4,592	6,6	8.1
Waterbury, CT	Public	23	9,592	6,800	7,175	70,9	74.8
47940 Waterloo-Cedar Falls, IA	Total	206	96,818	12,336	13,553	12,7	14
Waterloo-Cedar Falls, IA	Private	175	82,821	8,831	8,831	10,7	10.7
Waterloo-Cedar Falls, IA	Public	31	13,997	3,505	4,722	25	33.7
48140 Wausau, WI	Total	117	97,704	4,866	5,744	5	5.9
Wausau, WI	Private	103	87,286	3,409	3,409	3,9	3.9
Wausau, WI	Public	14	10,419	1,457	2,335	14	22.4
48620 Wichita, KS	Total	534	274,786	22,050	28,855	8	10.5
Wichita, KS	Private	454	232,732	14,616	17,576	6,3	7.6
Wichita, KS	Public	80	42,054	7,433	11,280	17,7	26.8
49180 Winston-Salem, NC	Total	176	203,466	7,759	10,237	3,8	5
Winston-Salem, NC	Private	155	179,391	4,782	4,782	2,7	2.7
Winston-Salem, NC	Public	21	24,075	2,978	5,456	12,4	22.7
79600 Worcester, MA-CT	Total	167	195,457	23,121	24,016	11,8	12.3
Worcester, MA-CT	Private	143	166,796	9,024	9,920	5,4	5.9
Worcester, MA-CT	Public	24	28,661	14,097	14,097	49,2	49.2
49420 Yakima, WA	Total	93	94,453	11,169	14,190	11,8	15

Yakima, WA	Private	76	77,585	2,287	4,446	2.9	5.7
Yakima, WA	Public	17	16,869	8,881	9,744	52.6	57.8
49620 York-Hanover, PA	Total	161	177,196	15,490	16,523	8.7	9.3
York-Hanover, PA	Private	139	153,133	9,818	9,818	6.4	6.4
York-Hanover, PA	Public	22	24,063	5,672	6,705	23.6	27.9
49660 Youngstown-Warren-Boardman, OH	Total	193	193,647	34,903	44,051	18	22.7
Youngstown-Warren-Boardman, OH	Private	177	177,424	25,047	34,194	14.1	19.3
Youngstown-Warren-Boardman, OH	Public	16	16,224	9,857	9,857	60.8	60.8

Data Sources: Current Population Survey (CPS) Outgoing Rotation Group (ORG) Earnings Files, 2014. Sample includes employed wage and salary workers, ages 16 and over. Variable definitions are: Obs=CPS sample size, Employment=wage and salary employment, Members=employed workers who are union members, Covered=workers covered by a collective bargaining agreement, %Mem=percent of employed workers who are union members, and %Cov=percent of employed workers who are covered by a collective bargaining agreement. Metropolitan areas in the CPS beginning May 2004 tables are based on 2003 Census definitions used in the CPS beginning May 2004; areas are not necessarily compatible across time periods. CSAs at the top of the table identified by Census CSA code. CBSAs in the remainder of the table are identified by Census FIPS codes.

© 2015 by Barry T. Hirsch and David A. Macpherson. The use of data requires citation.